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Review research paper

LANGUAGE PROFICIENCY TEST DESIGN FOR A GROUP OF MILITARY PILOTS: CRITERIA, CONSTRUCT AND PURPOSE

Ana Lígia Barbosa de Carvalho e Silva

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Abstract. *Despite the growing number of studies devoted to Aeronautical English, the role of language assessment to military pilots seems to be largely overlooked. To narrow this gap, this study aims at putting forward some findings of a broader study (Silva 2022) which comprises a test design for a group of pilots from the Air Demonstration Squadron (EDA) of the Brazilian Air Force (FAB). Test design refers to the definition of crucial aspects of a test, prior to its development, such as: i) the criterion, or the communicative behavior expected in the target situation; ii) the construct, i.e., what the test is intended to assess; and iii) the purpose, which is mainly related to the reason why the test is designed and the interpretation and uses of its results. Language Assessment for Professional Purposes (LAPP) (Knoch and Macqueen 2020) is the main theoretical framework that guided this “Mixed Methods Case Study Design” work (Creswell and Clark 2018). Results indicate that the design of an English test for EDA pilots, based on a needs analysis, should be wide enough to encompass the use of Aeronautical English (phraseology and plain English for radiotelephony communications) and a more general language. As for the test purpose, data analyses indicate that test results could be useful in the selection of pilots who would be more suited to fly together as crew members. The expected contribution of the study is to provoke reflections on the main characteristics of an English proficiency test for military pilots, without losing sight of the commonalities it may have with language needs for other pilots around the world.*

Key words: *Aeronautical English, test design, pilots, language assessment for professional purposes (LAPP, language proficiency, ESP).*

1. SETTING THE RESEARCH SCENARIO

In recent years, more precisely after 2004, when ICAO published the first version of the Language Proficiency Requirements (LPRs), Doc 9835 (ICAO 2010), numerous researchers have shown interest in the specific language needed by pilots and air traffic controllers (ATCOs) for radiotelephony communications, known in the literature as Aeronautical English (Borowska 2017; Tosqui-Lucks and Silva 2020). Attachment A to Annex 1 of the same document even introduced a six-band analytical rating scale, which

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has been used to establish levels of language proficiency to pilots and ATCOs' language abilities for certification purposes.

It is important to notice that, despite ICAO's efforts to reinforce good practices in language assessment for aviation, this international organization did not prescribe, at any point, a particular test to be used, leaving such responsibility to testing services groups and national agencies. Thus, many Aeronautical English tests started being developed in different parts of the world, not all of them with the same quality, as demonstrated in a report on a survey of Aviation English tests produced by C. Alderson (2008).

Although civil aviation pilots and ATCOs were the main target of ICAO language recommendations, the LPRs soon started being used to guide language teaching and assessment for aeronautical communications in the military scenario as well, according to previous studies (Santos, Pacheco, Reyes, et al. 2018; Katsarska 2017; Er, Kirkgöz 2018; Bratslavskaja 2020; Park 2020). Different ways to teach and assess this very specific language started being debated, due to the high-stakes nature of the decisions made, based on the interpretations of the results of exams guided by the LPRs. The construct of Aviation English, and even the appropriateness of ICAO rating scales, started being questioned worldwide (Knoch 2014; Kim and Elder 2015).

In that regard, a language needs analysis research for pilots from the Air Demonstration Squadron from the Brazilian Air Force, or "Esquadilha da Fumaça" (EDA¹) (Silva 2016) concluded that further studies were necessary to better understand what, exactly, needed to be assessed in an English language test for this specific group of pilots, who represent Brazil and its Air Force, not only in the air, with acrobatic air demonstrations, but also in other international events, as diplomatic representatives. To fulfil this gap in research, the aim of this study is to put forward the results of a broader investigation (Silva 2022) that comprises a test design for EDA's pilots, stating the criteria, construct and test purpose. With that in mind, the research questions that guided this study were:

- 1) what is the target language use domain, for EDA pilots? (criteria)
- 2) what are the knowledge, skills and abilities (KSAs), that have to be tested in a language proficiency test that is representative of the TLU situation for EDA pilots? (construct)
- 3) what are the potential uses of an English language proficiency test results for EDA pilots?

In short, stating the theoretical principles of an Aeronautical English test design for a group of military pilots, according to a language needs analysis, is the great contribution this study brings to the literature of English for specific Purposes (ESP), Language Assessment for Professional Purposes (LAPP) and Applied Linguistics, at large.

2. THE PATHWAY FOR DATA COLLECTION AND ANALYSIS

The methodological approach chosen for this investigation was a Mixed Methods Case Study Design (MMCD) (Creswell and Clark 2018) described as a complex application of a convergent mixed methods, in which qualitative and quantitative data were used, within the framework of a case study. The final product achieved is a thorough in-depth description

¹ A few acronyms used in this paper will remain in the same way they are used, originally, in Portuguese. That is the way they are commonly referred to, which means that changing them would sound artificial and unnatural.

of a case, i.e., a test design for EDA pilots, with more details than a study in which only qualitative or quantitative data are used in isolation.

The twenty six participants in the study were categorized as follows: i) the Brazilian Air Force Academy commander; ii) one expert in international air traffic control, who applied the operational and Aeronautical English phraseology test (TAI) at EDA; iii) two Brazilian Air Force Academy English professors (one who teaches General English and the other who teaches ESP); iv) fourteen pilots, members of EDA during data collection, or *Actual Pilots (AP)*; ii) eight EDA *Veteran Pilots (VP)*, who had been members of EDA, but later on, in their careers, had also worked as pilots on the international civil aviation. This parameter was used for choosing these participants because they were familiar with both ways of assessing language proficiency for pilots in Brazil: the exams developed by the Brazilian Air Force, and the exam developed by the National Civil Aviation Agency (ANAC).

A workshop session was provided to APs, organized by this researcher in conjunction with an exam rater from ANAC, in order to introduce the *Santos Dumont English Assessment (SDEA)*, the only Aeronautical English exam officially applied to civil pilots in Brazil. This procedure was considered necessary because the APs had never sat the SDEA, and only knew the assessment system adopted by the Brazilian Air Force. Interviews, questionnaires, observations and documental analyses were the methodological instruments used for data collection and triangulation. Qualitative data was analyzed through content analysis (Bardin 2016), whereas quantitative data, generated from closed questions in questionnaires, were analyzed through descriptive analysis.

3.THEORETICAL CONSIDERATIONS

In the past four decades, a lot has been debated about the main characteristics of ESP language tests. Douglas (2013: 368) clearly explains “first, that language use varies with context, second, that specific purpose language is precise, and third that there is an interaction between specific purpose language and specific purpose background knowledge”. There seems to be no better context than aviation to illustrate this understanding of language for professional purposes and its specificities.

A conceptual difference, with great impact in test design, has been established between the umbrella term *Aviation English*, which encompasses all the language used by professionals in aviation at large, such as mechanics, engineers, and *Aeronautical English*, and the specific language used by pilots and air traffic controllers (ATCOs) to communicate over the radio (Borowska 2017; Tosqui-Lucks and Silva 2020). According to these authors, Aeronautical English has basically two elements: i-) *standard aeronautical phraseology*, a very specific register to be used use in normal situations; ii) *plain aeronautical English*, for abnormal or emergency situations.

The intriguing question that seems to remain unanswered in language assessment for specific/professional purposes, and consequently for Aeronautical English tests, is not only *how much*, but also *how*, language and operational-content knowledge could be assessed, in order to make the test as representative as possible of the communicative situations the pilots will encounter in real life. In this regard, Moder (2013:239) states that “it is essential to include both routine and unexpected radiotelephony tasks in Aviation English tests, making use of representative authentic combinations of phraseology and plain language”.

Language test design is the moment *per se* to make crucial decisions regarding the necessary alignment between the test purpose, the language to be assessed in test tasks, with its corresponding assessing criteria, and, finally, the language use situation. A detailed definition of *what, how* and *why* we are testing language for professional purposes, based on a comprehensive needs analysis, operationalized in clear test specifications, can steadily guide test development and application.

A fundamental concept that illuminated this study was a socially oriented theory, followed by a model with samples of the linguistic repertoire in the workplace to help determine the test construct, in terms of language specificity. This model, in the field of Language for Professional Purposes, called *Codes of Relevance* (Knoch and Macqueen 2020) is presented in Figure 1.

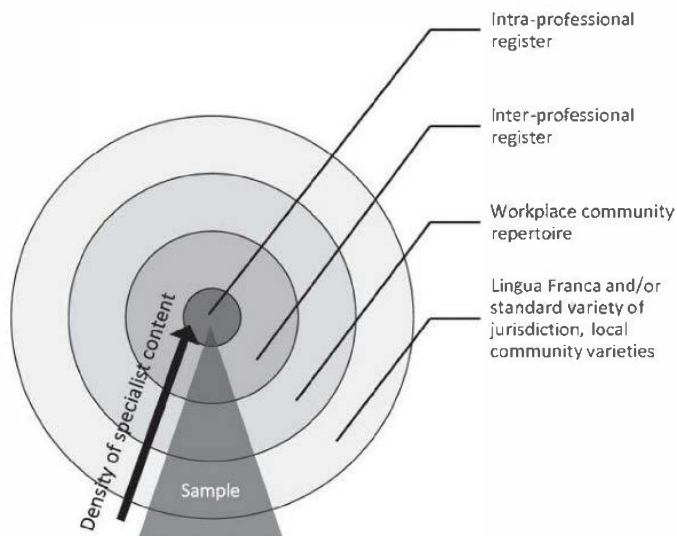


Fig. 1 Codes of Relevance (Knoch and Macqueen 2020).

This model introduces a current and innovative vision to explain the different contexts of language use for specific purposes, demonstrating the complexity of the interaction between language and specific content. The illustration, in Figure 1, shows how much task content in the assessment instruments can vary in relation to the density of their specificity, depending on the different interlocutors and contexts of language use in the target language use (TLU) domain. It can be observed that professional communications can vary from a high level of specificity, passing through a slightly less specialized register, but still between professionals of the same area of work, to reaching communications with the general public, with the use of local lingua franca varieties.

The most inner circle, called intra-professional register (Knoch and Macqueen 2020) represents the use of language by a reduced number of professionals who share a very specialized and precise linguistic repertoire at the workplace, due to a certain amount of shared background knowledge, with greater levels of inseparability between language and specific content.

As the circles move outwards, the degree of specificity decreases progressively, making communications more accessible to a larger number of individuals, until reaching the language used in everyday conversations among ordinary people. Thus, the sphere marked by the inter-professional record represents communications between professionals with some specific and shared background knowledge. The last two circles represent less density levels of specialized registers, getting closer to what is popularly known as “general language”.

4. ANSWER TO RESEARCH QUESTION 1: TEST CRITERIA/DOMAIN

Data analyses, including triangulation of participants, instruments and methods, provide convincing evidence that there are basically two categories of language use situations for EDA pilots: i) while flying, in routine and in non-routine situations; ii) on the ground, in many different situations. Thus, the necessary language for such a wide domain should fall in different points in a continuum of specificity (Douglas 2000).

In order to answer research question 1, the language needs analysis previously conducted for EDA pilots (Silva 2016) had to be reviewed and updated.

Firstly, results from the Present Situation Analysis (PSA) indicated that both assessment systems used for pilots in Brazil (from ANAC and from the Air Force) should undergo a validation process. Underrepresentation of the construct, which is one of the threats to validity (Messick 1989), was observed in both contexts. This phenomenon occurs when “the test is too narrow and fails to include important dimensions or facets of focal constructs” (S. Messick 1989: 4). For example: the SDEA, from ANAC, does not directly assess the use of *standard aeronautical phraseology* in English, because ICAO considers it “operational knowledge”, and not language knowledge. On the other hand, the assessment system at the Air Force does not directly assess the use of *plain aeronautical language* in abnormal or emergency situations. Therefore, none of the existing exams that have been used in Brazil, so far, seem to be adequate to assess EDA pilots’ communication needs in English.

Secondly, results from the Target Situation Analysis (TSA) corroborates previous findings (Silva 2016), as the situations of language use for these pilots have remained unchanged, and spotted in a continuum of specificity, ranging from a very specific register (*aeronautical phraseology*), to be used in normal situations during flights, moving on to less specific register (*plain aeronautical English*), for abnormal and emergency flight situations, and a more general register, for situations on the ground, where EDA pilots have to perform social and professional tasks (in aeronautical events or not), acting as real representatives of their country and their Air Force.

5. ANSWER TO RESEARCH QUESTION 2: TEST CONSTRUCT

Taken altogether, quantitative and qualitative data analysis provide enough evidence that the theoretical and stated construct of an Aeronautical English proficiency test for EDA pilots is rather complex.

Evidence also indicates that knowledge, skills and abilities to be assessed cannot be totally separated from content or operational knowledge. The main linguistic skills to be assessed are listening and speaking, with use of precise specific vocabulary, integrated with note taking, in real time, while multitasking (communicating, piloting and navigating). It is also mandatory to assess certain strategic competences, such as asking for repetition and/or

reformulations, making inferences and clarifications, negotiating meaning and adapting to a less proficient interlocutor. Also important is the openness to regional accents and local air traffic rules, not always clearly explicated on flight plans. Other strategies to be assessed include the use of English language on the ground to recognize implicit meanings, express opinions, compare, demonstrate hospitality, express humor, answer questions, give interviews and speak in public.

As for test format, findings in the study show that language proficiency for EDA pilots should be assessed by means of a *performance* test, which simulates the real situation of language use, including phraseology in English and plain language, with the appropriate transition between these two registers. The use of technology in test design and administration is strongly recommended.

Of similar importance is the assessment of code-switching, as pilots can choose to communicate with ATCOs either in Portuguese, their mother tongue, or English, the international language of aviation, while flying in the Brazilian airspace. Other aspects that should never be disregarded are situational awareness, intercultural diversity and distress, in emergency situations. In order to comprise such an extended construct, more than one test instrument could be used (alternatively, one test with different parts).

To better illustrate the test construct here proposed, Figure 2 shows the different levels of specificity that needs to be operationalized, according to *Codes of Relevance* (Knoch and Macquene 2018), as mentioned in Section 3.

	High saturation of specialist content		Low saturation of specialist content	Lingua franca and /or standard variety of jurisdiction, local community varieties
Professional domain	Intra-professional register	Inter-professional register	Workplace community repertoire	
Aeronautical English	<ul style="list-style-type: none"> Pilots/ATCOs radiotelephony communication 	<ul style="list-style-type: none"> Communication between pilots, ATCOs and ground personnel about flight related issue 	<ul style="list-style-type: none"> Communication between pilots and passengers, through the radio onboard or face to face, about flight safety related issues 	<ul style="list-style-type: none"> Aviation English / Aeronautical English English as lingua franca for international aviation Code-switching (phraseology/plain English)

Fig. 2 Codes of Relevance for EDA pilots

5.1. Codes of relevance: Intra-professional register

Aeronautical phraseology, for normal situations during an international flight, is the most specific register that should be assessed in a language proficiency exam for EDA pilots. Alternatively, the use of plain English, for abnormal and emergency situations should also be assessed. The use of content knowledge, phraseology and plain language should not be considered separately, but in an integrated way, as close as possible to real life situations of language use.

5.2. Codes of Relevance: Inter-professional register

It is necessary to assess the language needed by EDA pilots to interact with a variety of interlocutors, in different contexts of language use, i. e., on the ground, during stopovers and at final destination, to discuss many topics, such as those related to air demonstrations, the aircraft flown by EDA team, and its operational equipment. Therefore, the language register should include a combination of general and specific vocabulary, aviation related, or not.

5.3. Codes of Relevance: Workplace community repertoire

It comprises the necessary language that EDA pilots need to communicate with air show organizers, authorities, the public in general, and the press, before or after air demonstrations abroad. Other actions include taking part in global interchange programs, participating in aviation fairs and events, and hosting foreign visitors to EDA's headquarters. All these situations of language use involve a wide range of vocabulary, aviation related, or not.

6. ANSWER TO RESEARCH QUESTION 3: TEST PURPOSE

Several findings of this study support the assumption that, in practical terms, the results of an Aeronautical English exam for EDA pilots could be useful to assist EDA's Command and Operational Sectors in making relevant decisions, such as choosing the most appropriate pairs of pilots to compose a military crew in a double-seat military aircraft for EDA's travels overseas, with a view to greater safety in aeronautical communications during these flights. Test results can also be used to help these officers choose those pilots who would most effectively and appropriately represent Brazil and its Air Force in certain events on the ground.

At this point, it is relevant to highlight that Brazilian Air Force pilots, who become EDA members, spend only a few years of their military careers in that position. After a period of no more than five years, they have to leave the group, in order to give way to other pilots, who also wish to join the most famous squadron in the Brazilian Air Force.

As it is easily presumed, the admission process to select a new member of the group is very competitive, including operational, administrative and personal criteria. To these days, English language proficiency is not one of these criteria. Maybe in the near future, in case language policy at the Brazilian Air Force changes, results of a language proficiency test, built upon a serious language needs analysis, could be one more useful tool to help them make assertive and appropriate decisions in choosing the best of the best pilots, to represent Brazil and its Air Force internationally, including language-wise, in the air and on the ground.

7. CONCLUSION

In the process of designing or validating a language test for professional purposes, we may often times ask ourselves: Are the test tasks, test instruments and rating criteria appropriate and adequate to the test purpose? Is the language being assessed really representative of the language needed in real life situations? What are the possible interpretations and uses of test results? What is the potential impact of the decisions made, based on test results, in terms of fairness and justice? It remains clear, by the end of this study, that answers to these questions

can only be supported by a solid tripod, made of a clear definition of the *test criteria*, *test construct* and *test purpose*, based on a comprehensive needs analysis. English language test design for military or civil pilots, all the same, should follow suit. Still, future studies will have to look at ways to put together research and discussions that have been taking place in both aviation sectors, civil and military, so that we can all benefit from the contributions that could be given to one another, for safer and better skies to all of us.

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Review research paper

AB-INITIO PILOTS' PERSPECTIVES ON THE USE OF SIMULATION IN THE AVIATION ENGLISH COURSE

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Abstract. *Flying is costly, time-consuming, dependent on weather and maintenance, and sometimes simply does not match with schedules well. When flying a real aircraft is not a feasible or even preferable for one reason or another, a flight simulator could be remedy. Using a flight simulator to improve ab-initio pilots' knowledge and abilities may make their flying experience more effective and enjoyable. In this respect, this study aims to enhance aviation training through simulation-based learning and develop an understanding of how prospective pilots perceive the innovative approach of simulation integration in Aviation English courses. The X-Plane version 11 was used in conjunction with an introductory course in Aviation English and provided a substitute for an actual flight test experience at an aeronautical university. The sampling consisted of 20 tertiary level students enrolled in the Aviation English course. After the intervention, randomly selected 7 students were interviewed to gain insights into their perceptions about the use of simulation.*

Key words: *Simulation, Aviation English, ESP, iPad*

1. INTRODUCTION

The term "simulation" conjures images of sophisticated computer-generated replicas that closely resemble the look and feel of the cockpit for many in the aviation industry. Simulation had a far more modest beginning. The possibilities that flight may provide grew not long after the discoveries of the late 1800s and early 1900s that led to controlled, engine-propelled flight. Manned flight was swiftly embraced not just for transportation but also for many other civilian and military services, so that it was no longer the domain of a tiny band of daring souls who flew for novelty's sake. Nearly as soon as the aviation business took off, concerns about how to efficiently and swiftly educate pilots emerged. Many attempts were made to create simulated flight for training reasons due to the risk that early flying presented for pilots (Reid, & Burton, 1924; Clark, & Steward, 1962). However, the sheer volume of personnel that early military aircraft fleets needed to educate effectively made many early notions of simulated flying ineffective (Rolfe and Staples, 1987). As a consequence, most early pilots were forced to sit through lectures in class before engaging in actual flying training exercises. Flying might be seen as dangerous, even for veteran pilots, even though engineers continued to unravel the

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secrets of efficient aircraft design. Naturally, this risk was increased for novice trainee pilots. Flight simulators were created to increase safety in training as a result of the high cost of lives and airplanes lost alone during training (West & Cummings, 2007).

Simulation-based learning in aviation is important for individuals such as pilots, air traffic controllers (ATCs), maintenance, ground operations and safety board. These jobs required adept and expert workers to perform highly experienced and knowledge-based operations. Aviation training which is usually conducted in the training centers, technical schools or community colleges develops expertise in the industry through a combination of field training and theoretical knowledge gaining at schools. However, the high risk of acting in the field poses challenges for particularly prospective pilots as the probability of making mistakes might lead a disastrous accident. Serious thought, thus, has been given to the use of simulation in aviation training as a simulation, like a flight simulator, is a computer-generated imitation of the genuine thing (Lee, 2017). It helps trainees to experience real lifelike scenarios in the school environment. In other words, a scenario or process is imitated by using technology for training or education. When the actual system or environment cannot be utilized—for instance, because it is inaccessible or potentially dangerous—simulation is often employed (Kuofie & Suman, 2021). Simulations display the actual results of various circumstances and actions. It is also described as a technique to facilitate learning how to deal with real-life situations. In aviation, it is recommended by professionals to be involved in simulated-scenarios in the computer-based environment prior to attending physical pilotage. Therefore, simulation-based learning is utilized as a method of teaching and learning that makes use of direct experience and allows for critical analysis and introspection (Kincaid et al., 2003).

One could claim that the aviation industry's rapid expansion and the nature of radiotelephony is the root cause of communication issues. Pilots and air traffic controllers who do not share the same native tongue use aviation English as the lingua franca. They are expected to maintain radio communication with the air traffic controller as well as operate the flight control surfaces simultaneously (Nesic & Hamidovic, 2022). Although technological advancements have made it possible to communicate even more clearly over radiotelephony, listening comprehension is still a major concern for aviation professionals because radiotelephony is still prone to background noise, which makes radiotelephony messages less understandable. This creates a high cognitive load on pilots, and it impedes the radio communication in the cockpit (Trippe & Baese-Berk, 2019). Additionally, lack of proficiency in English language has already resulted in fatalities, raising serious concerns among aviation authorities. Taking these issues into account, developing effective learning environments for ab-initio pilots is essential and crucial. Simulation is, hereby, comes into prominence as a facilitator in Aviation English trainings.

A significant change could be seen after integrating simulations into the classroom environment. According to the test results of American kids, Wenglinsky (1999) discovered that using classroom simulations was connected to several forms of social progress such as engagement, attendance rates, and reduced vandalism. Studies of the use of simulation for training in the aeronautical fields have shown similar excellent outcomes (Jentsch & Curtis, 2017). In another study by Dinçer and Dinçer (2021), the use of simulator-based games was found to enhance the vocabulary retention of prospective pilots. Delgado et. al. (2014), on the other hand, implies that simulators have been utilized without much consideration of how they might influence the engagement, perception, and retention. Therefore, a thorough grasp of what is known about how simulation affects

training is crucial for academics and practitioners. With this information, practitioners and academics will be able to design more effective trainings and conduct research that will direct the use of simulation in the aviation industry's growing future. Overall, this study, thus, seek out to understand the perceptions of ab-initio pilots who are trained with simulation-based learning in the Aviation English course. It is aimed to examine their attitudes, ideas, and beliefs on this innovative approach in the instructional delivery. For this reason, following research questions were addressed in the present study:

- a) How do ab-initio pilots perceive the use of simulation in aviation English training?
- b) Do ab-initio pilots favor the use of iPad in simulation-based aviation English course?

2. METHODOLOGY

2.1. Context

Turkey, particularly Istanbul, is fast becoming a hub for aviation since it hosts one of the biggest airports in the world. Accordingly, the number of institutions offering Aviation English courses has increased significantly in order to meet the demand on qualified pilots in terms of English language proficiency. These institutions mainly tap into coursebooks in the classroom. However, it has been recently reported that prospective pilots in Turkey lack hands-on experience in using Aviation English in the target setting (Demirdöken, 2022). Building on this issue in the Turkish context, the present study took place at a state university offering Aviation English courses for prospective pilots. These must-have courses are offered in an eight-semester-long academic program. While general English courses are offered in the first four semesters, Aviation English courses are offered in the remaining four semesters. The medium of instruction is English, and the course curriculum covers a range of aviation-related topics including aviation phraseology, radiotelephony communication, Meteorological Aerodrome Reports (METAR), aviation safety, and aeronautical information.

2.2. Participants

The participants were twenty student pilots who were recruited based on the purposive sampling technique (Maxwell, 1997). This technique calls for the deliberate selection of settings, people, or events and the data collected from such participants offer invaluable information that cannot be collected from other choices. At the time of data collection, the participants were in their fifth semester and were taking the Aviation English course. In addition, they had no prior Aviation English training or simulation-based learning experience. Therefore, the sampling served best for the purpose of the study. Participants' ages ranged between 20 and 22 ($M=20,85$), and their gender distribution was as follows: 17 males (85%) and 3 females (%15).

2.3. Instruments

The researchers have integrated a flight simulator called X-Plane 11 which is one of the most sophisticated and realistic simulation software in the market. The Luminar Research Company created and published it in 1998. It attempts to create a simulation of flying an airplane as precisely as possible. The degree of intricacy of the software combined with the visuals and processing power of computers allowed the application to depict flying in a highly

realistic way. Many real-world situations, aircraft and airports are available in the X-Plane's extensive collection of libraries. It can also imitate weather changes, aviation malfunctions, and it allows several types of vehicles, such as automobiles and boats, even if they are not actively utilized by the player. The game is incredibly realistic (see Fig. 1) and a strong option for use as a simulation engine thanks to all of a very robust physics engine, and a thorough API for programmatic access. Most importantly, the software could be used in PCs, IPADs, and Virtual Reality headsets. These attributes, particularly the realistic simulation engine and user interface, have also made X-Plane useful for a variety of other purposes, including the training of future pilots.



Fig. 1 X-Plane 11 Simulator

In the current study, a group of twenty prospective pilots received simulation-based instruction on the aviation English course. The researchers informed participants about the research before the intervention and got their written consents for taking part in the study. At the beginning, they watched tutorials about the application. Then, the intervention lasted six weeks and one hour per week was allocated for the intervention. The students gathered in a language learning laboratory in which there are computers and a 75" LED monitor that can be used with IPAD, VR headset and a computer. The researchers connected IPAD to the screen. Every week 4-5 students used the IPAD to practice the target topic. During this time, others were taking notes while watching the simulation and listening to the instructor's instructions. The researchers provided guidance through the simulation demonstrating at the LED monitor. Also, IPAD was present in the lab apart from the lecture hour so that curious and willing students might benefit during the week. At the end of the intervention, semi-structured interviews were conducted with seven randomly selected students.

Table 1. Topics of the simulation-based learning

Date	Topic
Week 1	Parts of an Airplane
Week 2	Airport Layout
Week 3	Take-off
Week 4	Cruising
Week 5	Landing
Week 6	Marginal Weather

2.4. Research Design

The present qualitative study has employed a phenomenological research design in order to analyze simulation-based learning in aviation from the perspectives of prospective pilots. Phenomenology focuses on describing and understanding “the meaning for several individuals of their lived experience of a concept or a phenomenon” (Creswell, 2007, p. 57). A qualitative phenomenological approach stresses the value of the individual's viewpoint and interpretation of the event under investigation in the context of their surroundings while allowing for an attention on experience from the individual's point of view (Creswell & Poth, 2016). This study seeks to examine how students perceived simulation-based learning in aviation and to what extent they value and praise this innovative approach.

2.5. Data Collection and Analysis

Each participant in the current research had a one-on-one, in-person semi-structured interview. The interviews lasted between 20 and 35 minutes and started with an introduction discussing the purpose and scope of the research, anticipated interview length, purpose of the data, and some demographic inquiries. Students were questioned about their impressions with simulation-based learning approach and the software. They were also queried about their engagement, motivation, and suggestions for this implementation. The researchers recorded the interviews and later transcribed the data with the *Other.ai* software.

The interview evidence was subjected to inductive thematic analysis to extract, examine, and report on recurring themes. First, the researchers conducted the interviews, transcribed the recordings of individual interviews, and reviewed the data many times to become acquainted with the content, as recommended by Braun and Clarke (2012) in their six-stage method to theme analysis. The transcripts were examined in the software, *MaxQDA* which allow users to analyze data, text, and multimedia for qualitative purposes in a scientific way. Initial codes that were pertinent to the study's questions were then created, and the codes and the extracted data were combined. Then, themes and subthemes were constructed using the detected codes. The codes were not decided with the top-to-bottom approach, instead they came out during the analysis. The researchers also individually coded the data iteratively to compare with the outputs of *MaxQDA* to improve the analytic procedure, as advised by Joffe (2011). Finally, the analyses were cross compared by two researchers so that a final decision on the codes and themes could be made.

Table 2. Sample coding of simulation-based learning in aviation from the students' perspectives

Theme	Subthemes	Sample Codes
Learning environment	Hands-on experience	Risk-free opportunity to practice... Good to practice here... Better than theoretical education...
	Engagement	Such an engaging tool... Cannot stand passing to new scenario...
	Retention	Keep my mind better... Permanent learning... Learn better and faster...
	Vocabulary acquisition	Many words in contexts... Learning by interacting with words... Great chance to learn phraseology...
	Listening	Good to improve listening skill... Audios help us to understand context... Beneficial as auditory input...
	Situational awareness	Testing different conditions... Opportunity to practice in meaningful contexts... Real lifelike scenarios...
Instructional tool	Visual quality Interface	Higher graphics... Stunning visuals... Easy to navigate in the main menu... Clear enough to find something... Simple and tidy menu type...
	Immersion	Desire to use it for hours... Lose track of time and place... Such an immersive application...
Equipment	Usability	Hard to use without joysticks... IPAD seems strange... Prefer using PCs...

3. FINDINGS

This section outlines the main findings of the study. In the course of this work, we discovered that students' responses to interview questions fall into three main themes, namely learning environment, instructional tool, and equipment.

3.1. Learning Environment

Students developed different attitudes towards simulation-based learning and the learning environment appeared as the first theme in our analyses. It consisted of six sub-themes: hands-on experience, engagement, retention, vocabulary acquisition, listening, and situational awareness. Based on students' reflections it was found out that integrating simulation into Aviation English course offered hands-on experience for student pilots. For example, S5 commented "I find it useful to do some practice on iPad because I do not take any risks." In a similar vein, S1 reported "I am aware of various aviation accidents, and it is therefore a big opportunity for me to get this experience in the classroom before I fly an airplane. It is far better than pure theoretical flight training." Referring to a similar point of view S4 stated "For me, flying is a dream that has come true thanks to simulation. Although I need more practice to

become a pilot, it is quite expensive to simulate flying in your home. Therefore, I can spend a lot of time on iPad to get the basic flying experience I need.”

Student pilots also perceived simulation as engaging, which were reflected in their responses. For instance, S7 said “I believe that X-Plane is taking me on a journey. It is more than completing a flying mission. I always look forward to unlocking the upcoming missions.” On similar grounds with her, S2 commented “At first, I thought it was a game but then I realized that it was more than a game with various missions to be completed. Also, unlocking the next mission was extremely rewarding and engaging for me.” Qualitative data analysis based on students’ perceptions revealed another sub-theme, retention. The student pilots highlighted the issue of retention by comparing simulation-based learning to conventional learning. As such, S3 reported:

I learned English in a traditional way in high school. The teacher used only the coursebook and PowerPoint presentations, which was dull for me. However, learning via X-Plane was a totally different experience in that it enabled me to keep the aviation terms in my mind easily. I believe that learning English in this way is a very innovative.

In addition, S6 reported “When I was enrolled in motivational flight, I benefited from what I learned in simulation sessions since they provided lasting learning.” It was also concluded that responses of student pilots pointed out developing listening skills and acquiring new words through simulation. To illustrate, S5 commented “I cannot easily comprehend the auditory inputs, particularly radio messages. That is why X-Plane was a great tool to hear aviation terms in real setting, which helped me develop not only my listening skill but also my word-hoard.” Comments such as “I thought I was learning by interacting with words” (S4) and “We all learn new words by memorizing but we cannot learn how they are used in real life, so I enjoyed learning new words in the simulation sessions by seeing explicit use of those words in the flight” (S1). What is more S5 highlighted how she benefited from the simulation sessions with regard to developing her listening skill before the English language proficiency test:

For me, the most difficult skill to develop is listening because it is not easy to understand some English-speaking pilots on the radio due to their heavy accent. I can be successful in the exam (referring to International Civil Aviation Organization’s English Language Proficiency Test) only if I can develop my listening skill. Therefore, I found out a new way to do some listening practice.

With regard to the learning environment, the last inference from student pilots’ responses was situational awareness which appeared in different ways during the interviews. While S2 highlighted that he tested “...different conditions, and it was like a challenge for me”, S3 stated “I felt as if I was completing some real-life missions.” S7 also elaborated on this matter and said that “I was able to realize what was really going on and I enjoyed practicing in a meaningful context.”

3.2. Instructional Tool

The second main theme that emerged from qualitative analysis was named instructional tool, and it reflected the way student pilots perceived X-Plane as an instructional tool in the Aviation English course. Responses that were associated with this main theme included

references to visual quality, interface, and immersion. As such, S1 mentioned the user-friendly interface of X-Plane: “I never had any difficulty in navigating to a different menu which was a good thing for me as a student. Besides, the images were clear, and it was a lot of fun to fly an airplane with such graphics.” The same feature was also highlighted by S6 who commented “It was easy to find what you were looking for in the simulation because the navigation menu was simple enough.” Another comment regarding the user-friendly interface of the software was as follows: “It was the first time I used software to simulate flying but everything was well-organized and unbelievably realistic, so it did not take me too long to get used to the software” (S7). Comments regarding visual quality and user interface also included the following compliment:

I was particularly impressed by the graphics. I had never seen anything like this before. It was almost the real aircraft in front of me on the LCD display...It was an awesome experience, ... and it was like high-end flight simulators I saw on YouTube. Learning is a lot of fun with such good graphics, and I think everybody wants to have one of them in the classroom. (S4)

Student pilots also reported being immersed by the flying experience X-Plane offered. For instance, S2 stated “... it was difficult to keep track of time and place when flying.” In a similar vein, S5 commented “It was an immersive application and I never wanted to stop flying.” Building on this view, S3 further stated “My desire to use it for hours and hours may never end. I think it is as real as it gets.”

3.3. Instructional Tool

The qualitative data analysis called forth the third and last theme, equipment. Unlike the others, this theme mainly included student pilots’ negative reflections on the use of simulation in the Aviation English course. S5, for instance, argued how it felt to control an aircraft on an iPad: “I think holding the iPad with your hands was not comfortable for me since I also needed to control flight instruments on the touch screen.” This issue was also highlighted by S2 who commented “... no matter how enjoyable it is to fly on an iPad, I have to admit that it can be less painful to control the aircraft with a flight control stick or a yoke” and by S3 who said “However, when it comes to controlling the aircraft on an iPad I would definitely prefer a different control device because I sometimes have difficulty in reaching out some buttons on such a big touch screen.” Apart from these comments, S7 further commented that she would prefer a desktop for the same purpose:

I mean it is not perfect. For example, you need to multi-task when flying, and it includes not only holding the iPad for a long time but also controlling different surfaces and displays in the aircraft. At the end of the day, it becomes really tiring. Therefore, I would prefer different software that can be run on a desktop.”

4. DISCUSSION AND CONCLUSION

The present study aimed to explore student pilots’ perspectives on the use of simulation in the Aviation English course. In the light of participants’ responses, it is conceivable that the learning environment was a key component in ESP teaching, and the students engaged highly

in the simulation-based learning environment. Student engagement is known to contribute positively to both student achievement and academic performance (Dotterer & Lowe, 2011; Harbour et. al, 2015). A notable example of student engagement in our study was that student pilots regarded simulation as an engaging tool that made their dreams come true and innovated the learning environment which, in turn, resulted in students being more interested in the course. Simulation, serving as an innovative instructional tool, can therefore be argued to have flattened conventional teacher-centered methods. In this sense this finding is a significant contribution to ESP teaching in that no study has reported on student engagement in Aviation English context except few studies that adverted this issue in ELT context (Davis & McPartland, 2012; Kurt et al., 2022) and provided similar findings. To illustrate, Kurt et al (2022) reported that motivation, concentration, and active participation were closely related to the instruction, which implied that instruction boosted affective, cognitive and behavioral engagement. Along similar lines, it was concluded in this study that prospective pilots enjoyed the simulation-based instruction and found what they were looking for. As a result, it can be hereby concluded that innovating the ESP classroom through simulation is believed to be rewarding for prospective pilots, and serious thought should be given to simulation integration for learning gains.

Another issue emerging from the findings of the present study relate specifically to effective and efficient incorporation of instructional tools into the language learning process for the purpose of equipping students with 21st century skills such as critical thinking, collaboration, and problem-solving which are also key skills required in the aviation industry. As discussed earlier, simulation is particularly preferred when it is potentially dangerous to incur the real settings (Kuofie & Suman, 2021), and it clearly sets forth the actual results to be obtained in these settings. Therefore, the use of simulation may be linked to facilitating learning how to deal with real-life problems. Concordantly, the responses of participants in this study explicitly showed that engaging in such simulated learning environment was like completing real-life missions. A possible explanation for this might be that it was the very first simulated flight experience for these participants, and they were immersed in this simulated environment to such an extent that they found it appropriate to compare it to real life. Their reflections might be true in that they had already completed some motivational solo flights despite having no prior experience in any type of flight simulator. These results further shows that technology integration ameliorates the quality of learning experiences to entertain students towards constructing relevant knowledge. This finding broadly supports the work of other studies in this area linking technology integration, particularly simulation, with the attainment of 21st century skills. For instance, Živković (2016) argued that integrating technology into ESP classroom will facilitate learning and thus, ESP students “will become creators of knowledge, competent and productive communicators, successful collaborators, independent and inventive thinkers, problem solvers and career experts” (p. 154). All things considered; the present research study has made a substantial contribution by building on prior research into technology-enhanced ESP learning environments.

The last finding to emerge from the qualitative data analysis related to the use of appropriate equipment in the ESP classroom. It is interesting to note that student pilots did not favor the use of iPad as an instructional tool so much as they favored the simulation-based learning environment. No matter how engaging the instruction and the setting were, participants still reported dissatisfaction with extended periods of iPad use. It was, however, mostly originated from the design of the instructional tool itself, not the software. A possible explanation may be the lack of adequate equipment that can serve for this purpose. However, the most significant

cause can be the challenging nature of technology integration. Even if ESP teachers have access to different modes of technology, it can sometimes be difficult to choose the most appropriate tool among many others. As discussed by Harrell and Bynum (2018), external factors such as poor infrastructure, inadequate technology, lack of sufficient technological tools, and effective professional development as well as internal factors such as low teacher self-efficacy and teacher perceptions affect technology integration. Therefore, it is of utmost importance for ESP teachers to develop a solid understanding of innovations in instructional tools as well as software that can suit best for the needs of their students. As for the present study, iPad was instrumented to run the X-Plane software, and it was inferred from participants' responses that iPad was a good but not the best instructional tool in a simulation-based learning environment. Nonetheless, this research is a first step towards a more profound understanding of using iPad for instructional purposes in ESP context, particularly Aviation English. Prior studies that have noted the efficacy of iPad as an instructional tool are limited to primary school (Henderson & Yeow, 2012; Hutchinson et al., 2012). Alternatively, iPad was reported as a useful tool to handle the result of pre-neurosurgical simulation in the field of medicine (Maruyama et al., 2014). Consequently, it has been shown for the first time that iPad can be instrumented in ESP classroom effectively to simulate real flight conditions for prospective pilots.

5. LIMITATIONS AND FURTHER RESEARCH

The present study has some limitations associated with the use of simulation in aviation. First and foremost, the sampling is limited to twenty, which was, in fact, the highest number of student pilots available at the time of study. The findings obtained from this sampling may, therefore, be further compared in a separate study to be conducted with more participants. Another limitation in this study concerns the time allocation and the availability of instructional tools. That is, there was only one iPad and participants had to experiment with it during the class-hour only. This resulted in the total amount of simulation time for each participant to be relatively limited. For these reasons, the same research design can be replicated with more iPads and for a longer period of exposure to the simulation software, X-Plane. Last but not least, the instructional tool itself can be discussed as a limitation of the present study. Despite iPad being instrumented as the instructional tool to run X-Plane version 11, different platforms including desktops or gaming consoles. In addition, virtual reality (VR) can be included in further studies.

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APPENDIX 1

Interview Protocol

1. How was your simulation experience?
2. How can you describe your simulation experience in comparison with your previous learning experience?
3. How can you describe the positive and negative aspects of simulation-based learning on your experiences?
4. How do you think that simulation-based learning contributed to your learning process?
5. If any, what were your challenges regarding simulation-based learning?
6. What would be the best word that describes your attitude toward simulation-based learning?
7. How would you consider learning Aviation English through simulation in the future?
8. How do you think simulation-based learning affected your overall learning performance?
9. How do you think that simulation-based learning was relevant to your studies?
10. How do you think about simulation-based learning in its contribution to the development of any skill other than language skills?
11. How do you think that your simulation-based learning process was meaningful to you?
12. What would be your biggest gain through simulation?
13. How did you feel while using IPAD to fly an airplane in a virtual environment?

Review research paper

CREATING AN AVIATION ENGLISH LESSON: A CORPUS-INFORMED MATERIAL DESIGN

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Abstract. *Since ESP materials call for authenticity and specific content related to the field, books available on the market are sometimes thought to be inadequate for students' target situations. As a subset of ESP, aviation English in this instance demands teachers to create teaching materials that cater to the students' needs, wants, and necessities. For many teachers, creating course materials in the aviation setting continues to be challenging. As a result, this article offers an alternative approach to designing aviation English lessons using the corpus. There are essentially two approaches to designing corpus-based material: direct and indirect. Nevertheless, combining the two approaches can be a new challenge in getting students interested in the learning activity. A corpus-data-driven learning activity is created and embedded in a lesson. This activity potentially involves students examining the linguistic patterns, lexical categories, word frequencies, synonyms, and other pertinent vocabulary tasks in the corpus. The activity exerts a considerable influence on enhancing their vocabulary knowledge and vocabulary size. Alternatively, aviation English teachers offer an indirect approach by selecting reading materials from the free online corpus, such as, among others, COCA. Choosing a text from the corpus is believed to ensure the text's authenticity. The teachers can automatically generate word or phraseology lists related to the field being learned from the text. Here, the corpus assists aviation English teachers in choosing suitable vocabulary for aviation students. This article highlights the approach of corpus-informed material design in an aviation context.*

Key words: *English for Specific Purpose, Corpus-informed material design, data-driven learning*

1. INTRODUCTION

Material for language teaching, such as textbooks, is an inextricable element of language teaching and learning. For some teachers, commercial textbooks provide avant-garde and prospective approaches to language teaching and learning. They are regarded as the most relevant material for pedagogical purpose in language teaching due to their portability, usability, and ease of use. In English language instruction, textbook serve two major purposes:

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to encourage the development of L2 competency and to provide comprehensive support for the teaching and learning of foreign languages (Vitta 2021).

Concerning English for general purpose (*EGP*), some literature discussed how to use and develop learning materials (Tomlinson 2011; Tomlinson 2012; Tomlinson 2016). According to Tomlinson (2016), teaching materials are everything exploited by teachers or students to bridge language learning either in a classroom or outside the classroom. However, the definition suggested is somewhat broad as it embraces a wide range of learning resources. In this case, we need to distinguish between teaching materials and teaching resources. Mishan & Timmis (2015, 12) illustrates that teaching resources are infinite sources, and the potential to turn them into teaching materials is guided only by our pedagogical thoughts. Therefore, the designer of teaching materials must be able to build pedagogical goals in the activities that go along with the teaching materials based on the principles of the language acquisition approach (Kuci 2020; Spiro 2013).

In ESP (*English for Specific Purposes*), the role of teaching material possesses an additional meaning compared to EGP, because students often pay attention to both aspects at once; language and content (Woodrow 2018, 346). Hutchinson and Waters (1987) have historically had a significant impact on ESP. They conceptualize a centralized learning approach in ESP that leans on a learning principle that the student entirely determines the content. They claim that ESP does not use a specific language or method, but is an approach to language learning based on the learner's needs. However, research investigating language patterns in large-scale corpora could be the basis to state that ESP has a particular genre used in its learning (Handford 2010; Paltridge 2013; Paltridge and Starfield 2011). Spiro (2013) further emphasized that ESP learners need to have specific discourse competencies in their socio-cultural context.

ESP teachers can exploit the corpus in preparing teaching materials to understand how a person uses language naturally in their community or cultural context. The corpus is utilized to know how a person speaks the language, not how a person must speak the language (Biber and Reppen 2015; Bloch 2013; Crosthwaite and Cheung 2019; Reppen 2011; Spiro 2013). Using authentic material through the corpus is also in line with the tradition of Systemic Functional Linguistics (SFL), which has used texts and corpus in studying linguistic phenomena (Wu 2009). Corpus-based research is also increasingly influential in exploiting authentic languages that can develop teaching materials (Bruyn and Paquot 2021; Flowerdew 2015; Friginal 2018; Granger 2015; Mishan and Timmis 2015; Römer 2011; Römer 2008). These studies suffice to answer Chomsky's criticism, which states that speech or written texts collected in a corpus are unnecessary and counterproductive because they are considered impractical to record all language structures (Andor 2004).

Regardless of this controversy, there is a critical aspect in ESP teaching materials, namely that ESP teaching materials need to reflect the objectives of the communicative situation. Therefore, ESP teaching materials usually include authentic material (Anthony 2018; Basturkmen 2010; Widodo 2016). This aligns with Richard (2001, 252), who classifies teaching materials into two types of approaches, namely authentic teaching materials and created teaching materials. Authentic teaching materials are not designed for language learning purposes (Basturkmen 2010). The texts are intended for experts in their fields that enable these materials to be easily accessed and exploited from language learning. In developing ESP teaching materials, ESP instructors and teachers of vocational courses need to work together. This is important to assist ESP teachers in choosing texts

relevant to their vocational fields. However, preparing course materials in the ESP context remains challenging for several ESP teachers.

The process of creating language learning material is intricate and involves multiple stages. For instance, conducting needs analysis, identifying target audience (e.g., local, national, or global), deciding on curriculum and examination requirements, accounting for current teaching technique, being open to innovation, considering local infrastructure, and ensuring that the material accounts for the requirements of language acquisition (Tomlinson 2016). When creating new resources, like textbooks, the teachers and students who will utilize the material are involved in the earliest stage (Richards 2015). In contrast to material created for a worldwide audience, it is simple to define a thorough profile of the target users and take into account the cultural context for local audiences (McDonough, Shaw, and Masuhara 2013). The materials writer must consider how teachers and students will use the textbook in either case.

Another thorny problem in developing material is choosing and determining approaches to language use and language learning (Richards, 2006, 2015; Tomlinson, 2016). Teachers incorporated their theories and opinions about how people acquire languages into their practice. Thus, in order to choose concepts that are helpful in creating content, such as the role of internal learner factors (i.e., affective and cognitive domains), language input, the learning environment, and teaching methodologies, language learning material writers need to have some experience and expertise in second language acquisition theories (Mishan and Timmis 2015). These considerations for ethical materials design influence the writers' selection of content categories, tasks, and their order (Macalister and Nation 2020).

Corpus-informed materials are relatively unique because they are based on authentic norm. The contexts in which words and grammar structures used are genuine. Materials that are informed by corpora are created using research on particular categories of reliable corpora sources. The use of corpora-informed materials can support the selection of linguistic items appropriate for a given proficiency level, such as structures, vocabulary, collocational patterns, and contexts of use. They can also include research results on a variety of corpora (e.g., learner/expert, L1/L2, different genres), present results of corpus research in the appropriate form for learners, such as charts, graphs, concordances, and frequency lists, and serve for authentic materials sourcing for listening and reading. The use of learner corpora research to identify the needs of a specific learner group is a beneficial use of corpus research into the creation of instructional materials (McCarten 2010).

Creating corpus-informed materials makes use of both the findings of corpora research and guiding principles in materials design. In order to decide what content will be included and how it will be presented, teachers or writers might employ corpora in the textbook writing process. The corpus research outputs are chosen based on "what is worthwhile, what one's students want, need, feasible and practicable" (Meunier and Reppen 2015, 566). Correspondingly, corpora support a logical design process and instructional decision making rather than developing an alternate framework for materials creation. A corpus-based method of materials design may be used to contrast this. After decisions regarding the materials content have been made, the corpus serves as a source of authentic example (Meunier and Reppen 2015). Previous research showed the effectiveness of implementing corpus-informed materials, either indirect or direct application (DDL) in many areas. To take for example, language teaching and learning (Flowerdew 2017), language assessment (Huang et al. 2018; Taylor and Barker 2008; Xi 2017; Kong 2017; Thirakunkovit et al. 2019), needs analysis for material development, (Staples 2019; Karpenko-Seccombe 2018), feedback and error

correction (Crosthwaite 2017), register and lexis (Crosthwaite, Wong, and Cheung 2019), teaching grammar (Lin 2021) and vocabulary in ESP context (Đurović and Bauk 2022). Despite the growing interest in corpus-informed material, little is known about how corpus-informed material are designed. This article is addressed to help ESP teachers, especially aviation English teachers, to provide a lesson by incorporating two different approaches: direct and indirect approach.

2. APPROACHES OF CORPORA IN LANGUAGE TEACHING

According to Crosthwaite (2020), DDL is a pedagogical strategy that directly engages learners with corpus data through printed materials or hands-on corpus consultation utilizing corpus tools. As part of the DDL methodology, students use corpus data to act as “language detectives” as they query, modify, and analyze a variety of output data, including concordance, word frequency, collocation, and multimodal forms of data. Smart (2014) advises two characteristics of DDL, the use of student-centered, discovery-based learning activities and the utilization of real language data as a basis for the creation of language learning resources. This method involves students participating in computer-based activities and conducting their own research by directly accessing corpora and concordance software. The second method, on the other hand, gives students indirect access to corpus data through corpus-informed, paper-based activities and materials that their teachers have developed beforehand (Boulton and Cobb 2017). These two methods have been referred to by several names, including the hard versus soft version of DDL, and learner-corpus interaction versus teacher-corpus interaction, direct versus indirect consultation of corpora, and hands-on and hands-off corpus usage (Sun and Hu 2020; Römer 2008).

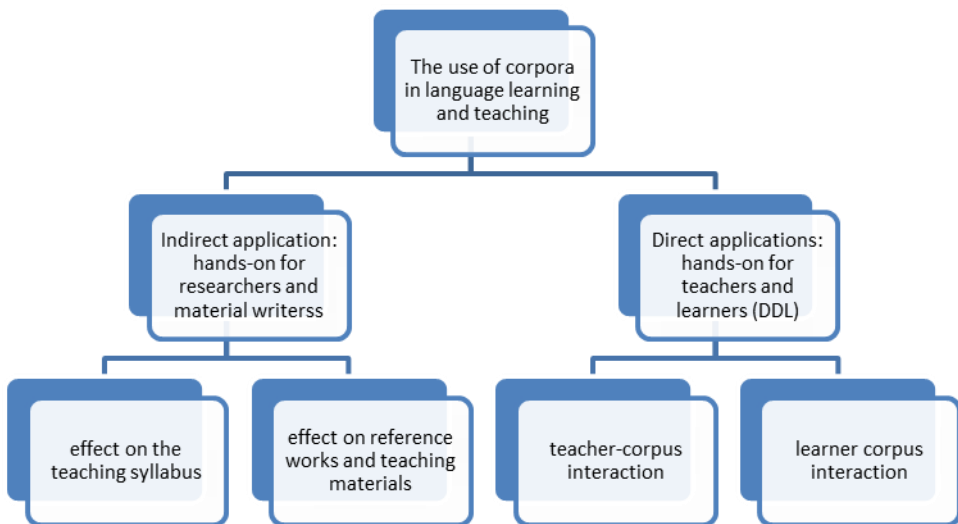


Fig. 1 Application of corpora in language teaching (Römer, 2008)

In this article, the term direct approach refers to the teachers and learners having direct access to corpus data to investigate the language. Direct means introducing students to corpora and getting them to work with concordance lines, frequency, etc., so as they can explore and discover the language feature by themselves. By contrast, indirect approach refers to the use of teaching and learning materials which is informed with corpus data. In this case, students are not involved inductively in the process of language investigation. Learners do not interact directly with corpus tools. Indeed, they are likely not even aware of them.

3. BUILDING A CORPUS

There are many choices for teachers in using corpus tools for preparing corpus-based activities. Teachers can use available corpus online, offline, or they even can build their own corpus. However, what corpus is suitable for students depend on the purpose, context and students' background. Mcenery & Hardie (2011) recommend the following software to build your own corpus.

Table 1 Corpus Software

Corpus	Subscription	Link
AntConc	free	http://www.laurenceanthony.net/software.html
wordsmith	Purchase	https://www.lexically.net/wordsmith/downloads/
LancsBox	free	http://corpora.lancs.ac.uk/lancsbox/download.php

Building a corpus is the last option for ESP teachers because there are many credible and large corpora available in the internet. However, as ESP teachers, especially aviation English teachers, sometimes we cannot find suitable or appropriate corpus for our teaching goal. Therefore, creating mini corpus is considered relevant for local audience purpose. This present study tried to give the example in creating a mini corpus by using AntConc version 4.0.5 released on February 2022 (Anthony 2022). It is used because the software is open access (free), it can be operated without internet data, and the interface of the window is user friendly. LancsBox can also be an option since the software can be utilized either offline or online.

3.1. Case 1 Using AntConc

Software can be downloaded at the following link: <https://www.laurenceanthony.net/software/antconc/>. Before downloading the software, we need to familiarize with our own computer and choose a suitable software that is compatible with our computer. Download and install the software to the computer. When creating a corpus, we need to determine the goal of language teaching in order to limit or set the criteria of the text being collected. After setting the criteria, collect suitable texts with our teaching purposes. That should be authentic use of the text, for example, building a mini dictionary of one particular aviation topic, e.g “aviation disaster”. In this case, texts should be classified only related to aviation disaster, we cannot use text beyond the topic to limit and specify the profile of the text. After collecting the text, convert all the text into plain text .txt file in a notepad application. However, if we use the

latest version of AntConc, source files can be in form of docx, pdf, and txt. Figure 2 shows the example of source text that will be inputted into AntConc.

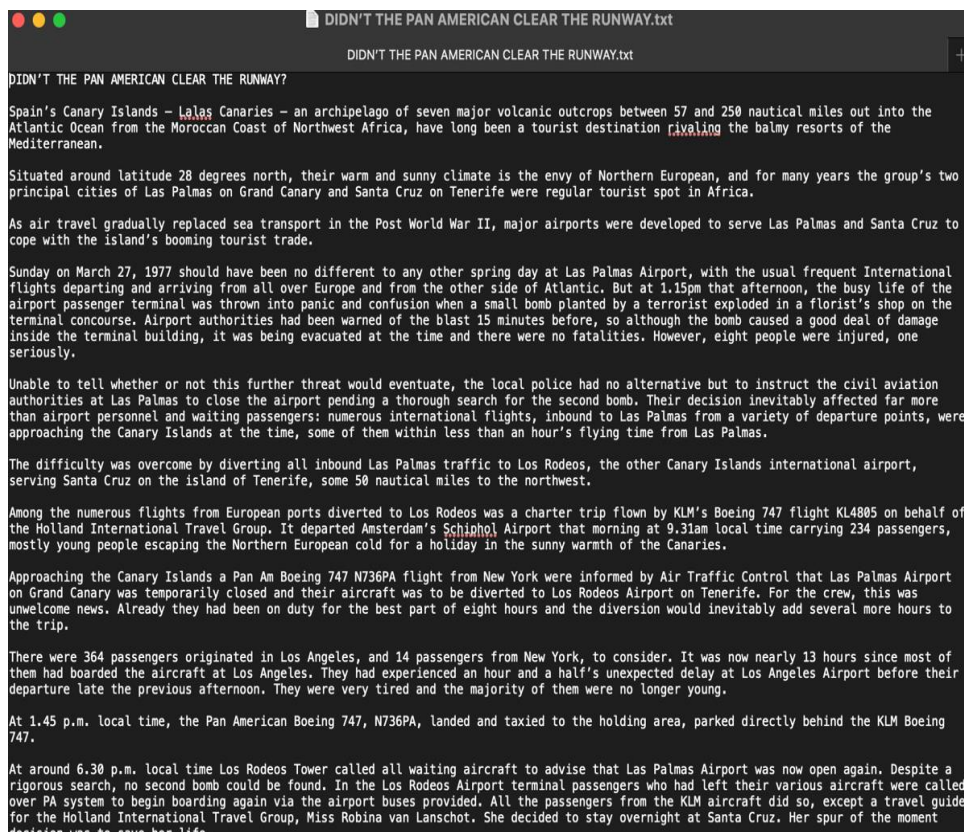


Fig. 2 Example of sources text

Process all the texts into AntConc when the teachers considered that the texts are sufficient for facilitating their teaching purpose. As the files are successfully loaded, the mini corpus is created. Teachers can start using corpus for their teaching. There are some interesting features that can be utilized for teaching, such as word frequency analysis, concordance analysis, N-gram and collocation analysis. Each feature has unique function depending on the purpose.

3.1.1. Doing Analysis: word frequency

Based on Figure 3, we can see that the *aviation disaster* corpus has 3911 word tokens with 1196 word types. The total number of texts is 10. From the number of tokens, we can classify these words into word classes (part of speech/POS) so that the source of the vocabulary that will be inputted into the dictionary is in accordance with needs of teachers and students.

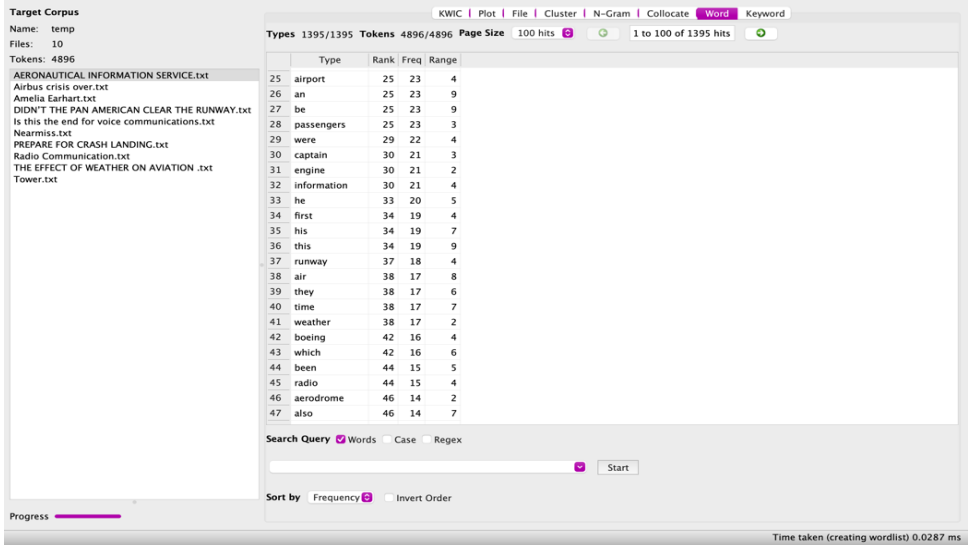


Fig. 3 Word frequency

3.1.2. Doing Analysis: Concordance

We can analyze how the word aircraft is in a context. Students can observe the context that forms the meaning of the word. In this case, students can know authentically the lexical bundles of the word aircraft via corpus. In addition, students can also see the real context based on sentences in the text and understand the word through context (lexical bundles). We can click the word on the list, the context of the accompanying sentence will appear. It is commonly known as keyword in context (KWIC) as shown in Figure 4.

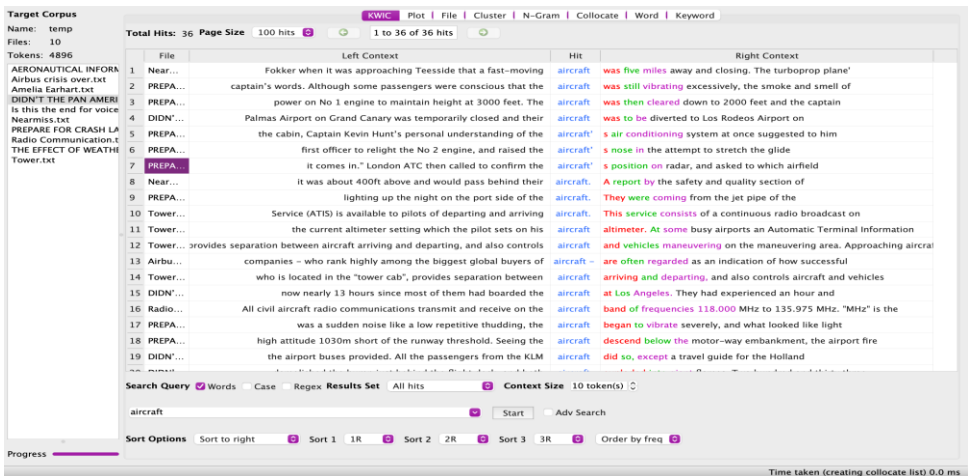


Fig. 4 Concordance

3.1.3. Doing Analysis: N-gram

Based on Figure 5, we can see common expressions that appear in the corpus in which the aircraft lexical bundle of size 2 is followed by the word e.g., *descend*, *arriving*, *altimeter*, *exploded*, etc.

The screenshot shows the N-Gram analysis interface with the following data table:

	Type	Rank	Freq	Range
1	aircraft was	1	4	3
2	aircraft s	2	3	1
3	aircraft were	3	2	2
4	aircraft a	4	1	1
5	aircraft altimeter	4	1	1
6	aircraft and	4	1	1
7	aircraft are	4	1	1
8	aircraft arriving	4	1	1
9	aircraft at	4	1	1
10	aircraft band	4	1	1
11	aircraft began	4	1	1
12	aircraft descend	4	1	1
13	aircraft did	4	1	1
14	aircraft exploded	4	1	1
15	aircraft from	4	1	1
16	aircraft had	4	1	1

Search Query: Words Case Regex N-Gram Size: 2 Open Slots: 0 Min. Freq: 1 Min. Range: 1

aircraft descend [Start]

Sort by: Type Invert Order

Fig. 5 N-Gram of the word aircraft

Furthermore, we can do a collocation analysis to know how one particular word collocates with another word via corpus (see Figure 6). It is essential in vocabulary activities to enlarge students' vocabulary knowledge. Figure 6 shows that the word *descend*, in the present corpus, collocates with the words *alert*, *saying*, *descend*, and *sounded*. However, to enlarge the word list, teachers can add more text in the corpus.

The screenshot shows the Collocate analysis interface with the following data table:

Collocate	Rank	FreqLR	FreqL	FreqR	Range	Likelihood	Effect
1	alert	1	2	2	0	1	19.728 8.350
2	saying	1	2	2	0	1	19.728 8.350
3	Descend	1	2	2	0	1	19.728 8.350
4	An	4	2	2	0	1	15.063 6.766
5	descend	4	2	1	1	1	15.063 6.766
6	sounded	4	2	0	2	1	15.063 6.766
7	then	7	2	0	2	1	10.645 5.181

Search Query: Words Case Regex Window Span: From 5L To 5R Min. Freq: 1 Min. Range: 1

descend [Start] Adv Search

Sort by: Likelihood Invert Order

Fig. 6 Collocations with the word “descend”

4. CORPUS-INFORMED ACTIVITIES

Several pedagogical activities can be designed from one particular task. Teachers for example can make use of reading the text drawn from the corpus, then creating appropriate practice for students activities such as vocabulary, grammar, structure, writing tasks, to utilize the reading section. This article advises how to identify and analyze vocabulary from authentic material.

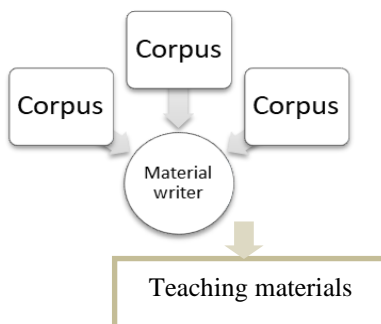


Fig. 6 Indirect corpus-informed material design

COCA is used to select and analyze appropriate material that relates to specific knowledge of aviation. Teachers can log in COCA (<https://www.english-corpora.org/coca/>) and write in a search bar one specific vocabulary related to the topic. To sort out the most appropriate topic, then go to the context, select one of the sources, COCA will directly take the user into source text. You can retrieve the reading materials from the available URL link in COCA. However, if teachers want to create vocabulary activities, COCA has Analyze text features. It helps material designer to list appropriate vocabulary, words frequency that has been classified into low, mid, and high. Here, teachers also can analyze every single word with their synonym, antonym, collocation, and also definition. To design language learning materials, we can also use the lextutor site, in the corpus we can design multiple choice worksheets, cloze tests, open ended questions, matching, and so on. The corpus is web-based and is free. Here is the address at which it can be visited https://www.lexutor.ca/cloze/vp/users/The_Problem_with_Lexie.html.

4.1. Identifying and analyzing vocabulary with COCA

4.1.1. Procedure for teachers

- 1) Access the online tool corpora from the sites
- 2) Look for the material from the internet, for example the article from Lacagnina, 2014 entitled “Mismanaged descent” <https://www.smartcockpit.com/docs/identified-threats-when-transitioning-from-imc-to-vmc.pdf>
- 3) Copy and paste the text into the analyze text box as following:

Corpus of Contemporary American English

SEARCH FREQUENCY CONTEXT ANALYZE TEXT

FREQ RANGE	1-500	501-3000	> 3000
357 WORDS	47 %	15 %	22 %

CLICK ON ANY WORD BELOW FOR A FULL WORD SKETCH

The indicated **airspeed** was on target, and the approach path lights showed that the airplane was just slightly high as it descended below 500 ft. the point at which the stability of a visual approach typically is judged. These indications were deceptive, however, and the flight crew did not recognize that the airspeed was decreasing rapidly and that the airplane would soon descend below the 3-degree glidepath. There were other signs that the approach was not stabilized. The thrust levers were at idle (the engines were not spooled up properly), and the descent rate was higher than it should have been. By the time the crew realized that a missed approach was in order, it was too late. "The airplane did not have the performance capability to accomplish a go-around," the U. S. National Transportation Safety Board (NTSB) said in its report on the subsequent accident. The Asiana Airlines Boeing 777-200ER clipped a seawall bordering Runway 28L at San Francisco International Airport, slid down the runway as it shed parts and became airborne again momentarily before coming to a stop in flames off the side of the runway. Three of the 291 passengers were killed, and 40 passengers, eight of the 12 flight attendants and one of the four flight crewmembers were seriously injured in the accident, which occurred the morning of July 6, 2013. The NTSB concluded that the probable cause of the accident was "the flight crew's mismanagement of the airplane's descent during the visual approach, the PFs [pilot flying's] unintended deactivation of automatic airspeed control, the flight crew's inadequate monitoring of airspeed, and the flight crew's delayed execution of a go-around after they became aware that the airplane was below acceptable glidepath and airspeed tolerances." The report said that factors contributing to the accident were: "(1) the complexities of the autothrottle and autopilot/flight director systems that were inadequately described in Boeing documentation and Asiana's pilot training, which increased the likelihood of mode error; (2) the flight crew's nonstandard communication and coordination regarding the use of the autothrottle and autopilot/flight director

LOW FREQ	MID FREQ	HIGH FREQ
5: airplane, airspeed 2: autopilot/flight, autothrottle, descent, glidepath, go-around, passengers, runway, visual 1: acceptable, accomplish, airborne, attendants, automatic, capability, clipped, complexities, coordination, crewmembers, deactivation, deceptive, decreasing, delayed, descend, descended, documentation, error, execution, flames, ft, idle, inadequate, inadequately, indications, injured, levers, likelihood, mismanagement, mode, momentarily, nonstandard, probable, properly, rapidly, seawall, seriously, shed, spooled, stability, stabilized, subsequent, thrust, tolerances, typically, unintended	7: flight 6: crew 5: approach 4: accident 3: below 2: director, pilot 1: aware, bordering, communication, concluded, contributing, described, eight, engines, factors, flying, indicated, judged, missed, monitoring, occurred, path, performance, realized, recognize, regarding, slid, slightly, soon, target, training	45: the 14: of 13: and 9: that, was 8: were 6: a 5: in 4: it, not 3: at, to, which 2: as, became, did, have, on, report, said 1: after, again, been, before, by, cause, coming, control, down, during, four, high, higher, however, increased, is, its, just, killed, late, lights, morning, national, off, one, order, other, parts, point, rate, should, showed, side, signs, stop, systems, than, there, these, they, three, time, too, up, use, would

Fig. 7 Analyse text feature in COCA

- 4) After the lists are generated, decide which words to focus on in classroom activities. For example, focus on low-frequency items, such as *airplane*, *airspeed*, *autopilot*, *auto throttle*, *descent*, *glidepath* and *go around*, as useful for both receptive (e.g., comprehension or main idea question), and productive (e.g., group discussion or summary writing) activities related to articles.
- 5) Some lexical items such as *descend* are relevant as multiple parts of speech (POS) and COCA permit students to discover this distinction on their own. Alternatively, teachers can further categorize the subject-specific vocabulary based on their own content knowledge. For instance, this article contains many parts of an airplane; or teachers can directly pick the vocabulary related to the discipline such as the following:

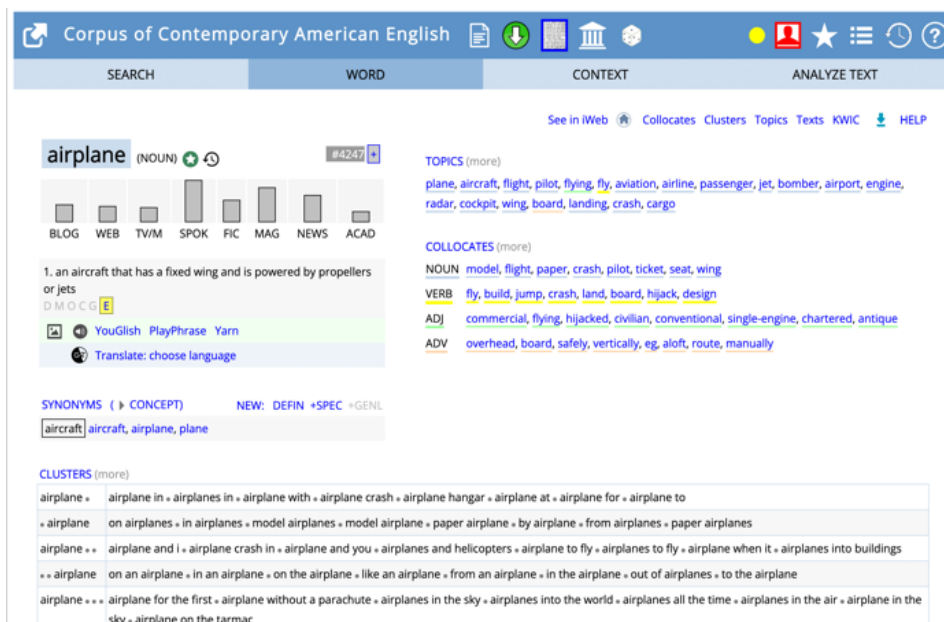


Fig. 8 Vocabulary list

This model can be implemented as indirect approach of a corpus-informed material design. Corpus assists teachers to identify vocabulary in many aspects such as collocation, synonym, antonym, definition, parts of speech, word frequency, context, concordance and many more. Teachers can create several activities for each aspect by providing paper-based activities or internet-based activities. In this model, students are not involved in investigating vocabulary through corpus. Teachers create and design the material with the help of corpus.

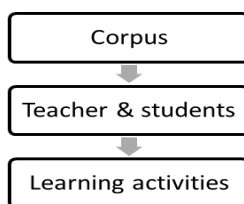


Fig. 9 Direct corpus-informed material

This approach involves teachers and students to directly access corpus data. They utilize corpus to investigate the language phenomena as their teaching and learning activities. In this model, both teachers and students should be familiar with the corpus. Therefore, the ability of using corpus is the prerequisite before teaching and learning process. The following is the example of direct procedure of corpus-informed activities.

4.1.2. Task for students

Analyze vocabulary identified by the teacher through discovery and exploration. After the instructor has determined the word list from the article, students can follow procedure for students. An example is given that permits the students to discover part-of-speech distinctions used in the article (i.e., a word as a noun and as a verb). Instructor could also indicate in the word list which part-of-speech to focus on.

Ask students to go to COCA. Click on “Frequency List” on the left side of the page. Teachers ask students to consider the following excerpt from the article “Mismanaged descent”:

“The indicated airspeed was on target, and the approach path lights showed that the airplane was just slightly high as it descended below 500 ft, the point at which the stability of a visual approach typically is judged.”

Students are asked to answer guided question for direct corpus activities. Some useful questions might be addressed such as: What part-of-speech is *descended* in this context? Which synonyms could you use for *descended* in the context of this excerpt? Which definition do you think fits the context of this excerpt? (click New: DEFIN+SPEC+GENL)

In the text, click “descended”, and choose the part-of-speech that matches the context described earlier.

The screenshot shows the COCA website interface for the word "descend". At the top, there are navigation links: "See in iWeb", "Collocates", "Clusters", "Topics", "Texts", "KWIC", and "HELP". The word "descend" is highlighted in yellow, with "(VERB)" and "#4576" next to it. Below the word is a bar chart showing the frequency of "descend" in different parts of speech: BLOG, WEB, TV/M, SPOK, FIC, MAG, NEWS, and ACAD. The FIC (Fiction) category shows the highest frequency. To the right of the bar chart is a list of "TOPICS (more)" including: steep, descent, climb, vertical, breeze, terrain, hike, scramble, bore, dense, depart, rim, plunge, instant, kneel, trail, faint, hover, mountain, mutter. Below the topics is a list of "COLLOCATES (more)" categorized by part of speech: NOUN (stair, step, foot, staircase, chaos, darkness, heaven, earth), VERB (climb, ascend, hover, poise, mar, slave, predispose, from), ADJ (steep, holy, ascending, ancient, wooden, narrow, eerie, spiral), and ADV (slowly, quickly, directly, rapidly, deep, gradually, steeply, en). At the bottom, there are sections for "SYNONYMS (CONCEPT)" and "NEW: DEFIN +SPEC +GENL". The synonyms section lists: arrive, descend, derive, descend, originate, spring, stem, fall, descend, fall, hit, pervade, prevail, go down, lower yourself, descend, fall, resort, sink, stoop, slope, incline, slope.

Fig. 10 POS category

After answering the questions, ask students to examine the collocates for *descended*. Click on a verb collocate and take a look at the concordance entries. Ask them to identify whether they see any patterns on the list.

CONCORDANCE LINES (more)

1	FIC: 2007: Bk:ColorsInsulting	planted land , and many thousands of grateful women ; They descended a good Roman road between two towering ranges , plunging into
2	FIC: 2007: FantasySciFI	later , Wasselthorpe announced he was through the mirror and descending a hillside path that led to a tarn of dark water .
3	NEWS: 2011: Houston	, watching her - attired in a red corduroy suit - descend a stairway . " I thought she was very cute . "
4	FIC: 1998: Mov:Armageddon	the oncoming ICE BOULDER . A.J. , terrified , continues to descend as a Chick , driving the Armadillo , rams the ICE BOULDER
5	FIC: 1997: Bk:OrdinarySeaman	drooping eyes , forehead slanting into a massive nose descending at almost the same angle , hulking but sagging shoulders , chubby
6	WEB: 2012: jesuschrist.lids.org	to their infirmities . " 18 In doing so , Christ " descended below all things " -- including every kind of sickness ,
7	NEWS: 2001: SanFranChron	place had all its soft elements removed . I suggested we descend for a more intimate experience of a marine " 1812 Overture .
8	MAG: 1996: Skiing	called by habitues , is a symphony of artistic brickwork that descends from a fateful fire in 1889 . There was a brick factory
9	ACAD: 2008: HealthSocialW	ethnic group made up of people who were born in or descended from a Latin American country . This group includes , but is
10	MAG: 1992: NatlParks	the Charley eventually joins the Yukon River . # The Charley descends from about 4,000 feet at its headwaters to 700 feet at the
11	ACAD: 1992: ArtBulletin	put at random ; they refer to two parallel traditions that descend from early Christianity down to the late seventeenth century .
12	MAG: 1990: Smithsonian	. # The rock doves that all these user-friendly birds are descended from still live in an area that stretches from the Hebrides
13	MAG: 1992: NaturalHist	of all remote Pacific islands , including Nauru , are descended from survivors of long canoe voyages , in the course of which
14	MOV: 1997: Ayn Rand: A Sense of...	and the New York skyline . But then , as she descended from the boat , a light snow began to fall . She
15	FIC: 1991: KenyonRev	. We met her at the bus station , where she descended from the bus , a short pillar of a figure in black
16	WEB: 2012: gojulesgo.com	hyperventilate while asking for an autograph . # When Darren descended from the ceiling as a window washer in the opening scene ,
17	FIC: 2014: Bk:KrakenProject	Let 's do it , " said Stein . # They all descended from the control platform and climbed onto the gantry holding
18	WEB: 2012: biblestudytools.com	(Greek , " hairesis , " Septuagint) . Peter descends from the eternal " election " of God through the new birth
19	WEB: 2012: iotu.chicago.edu	course , the Idea of the Research University did not just descend from the heavens into Hyde Park any more than the idea of
20	MAG: 2017: Ars Technica	in federal court . # Sovereign immunity is a concept that descends from the idea that you ca n't haul a king or other

Fig. 11 Concordance list of “descend”

Further activities can be added by asking them to choose another collocate such as adjective. Take a look at the concordance entries, then ask students whether they see any particular pattern on preposition. Last activities can be in the form of a written activity. Teachers asked students to create original sentences that contain the collocate and *descended*, with at least one sentence using an aviation topic for instance. The detailed procedure is available in Appendix 1.

5. CONCLUSION

Direct and indirect approach of corpus-informed material design can be an alternative way for aviation English teachers in designing their own material for the purpose of local audience. Customizing teaching material is not an easy task. There are some principles in material development that should be considered, including needs, wants, and necessities. Additionally, teachers should include their theories and opinions about how people acquire languages into their practice. To choose concepts like the importance of internal learner variables, language input, the learning environment, and teaching approaches, they frequently need experience in language learning and SLA theories. Teachers should include their theories and opinions about how people acquire languages into their lessons. To choose concepts like the function of internal learner variables, language input, the learning environment, and teaching approaches, they frequently need to have familiarity with language learning and SLA theories.

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APPENDIX 1

Lesson Plan	Aviation – Identifying and Analyzing Vocabulary: Mismanaged descent															
Time	50 minutes															
Resources	https://www.english-corpora.org/coca/ https://www.smartcockpit.com/docs/identified-threats-when-transitioning-from-imc-to-vmc.pdf															
Pre-task	10 minutes															
	1. Elicit the knowledge, skills, abilities and personal qualities required to be a pilot in emergency situation, accident or non-routine situation. 2. List on board and elicit types of questions that can be asked to get this information															
Task	20 minutes															
Dos for teacher																
1. Teacher verifies vocabulary related to the topic with students’ prediction; 2. Teacher provides vocabulary list, synonyms; and definitions, alternatively ask students to search from the corpus by following the procedures; 3. Teacher delivers a piece of excerpt from the text to be discussed. E.g. <i>The indicated airspeed was on target, and the approach path lights showed that the airplane was just slightly high as it <u>descended</u> below 500 ft, the point at which the stability of a visual approach typically is judged</i> .																
Task for students																
Read the procedures																
1. Go to COCA Click on “Frequency List” on the left side of the page. 2. Consider the following excerpt from the article “Mismanaged descent”: <i>The indicated airspeed was on target, and the approach path lights showed that the airplane was just slightly high as it <u>descended</u> below 500 ft, the point at which the stability of a visual approach typically is judged</i> .																
SS complete the following questions																
<ul style="list-style-type: none"> ▪ check answers 																
	<table border="1"> <thead> <tr> <th>Questions</th> <th>Answers</th> </tr> </thead> <tbody> <tr> <td>a. What part-of-speech is <i>descended</i> in this context?</td> <td>Verb</td> </tr> <tr> <td>b. In the search bar, type “descended,” and choose the part-of-speech that matches the context described earlier.</td> <td>Verb</td> </tr> <tr> <td>c. Which definition do you think fits the context of this excerpt?</td> <td>Free fall under the influence of gravity; move downward and lower.</td> </tr> <tr> <td>d. Which synonyms could you use for descended in the context of this excerpt? Choose two of them.</td> <td>Go down, fall</td> </tr> <tr> <td>e. Examine the collocates for descended. Click on a verb collocate and take a look at the concordance entries.e.g. minimize. Do you see any patterns?</td> <td>e. ..descended + a + N, ..descended + pref [from, for, in, into, on], ...descended + the</td> </tr> <tr> <td>f. Create two original sentences that contain the collocate and <i>impact</i>, with at least one sentence using an aviation topic.</td> <td>f. The aircraft start to descend rapidly due to engine failures</td> </tr> </tbody> </table>	Questions	Answers	a. What part-of-speech is <i>descended</i> in this context?	Verb	b. In the search bar, type “descended,” and choose the part-of-speech that matches the context described earlier.	Verb	c. Which definition do you think fits the context of this excerpt?	Free fall under the influence of gravity; move downward and lower.	d. Which synonyms could you use for descended in the context of this excerpt? Choose two of them.	Go down, fall	e. Examine the collocates for descended. Click on a verb collocate and take a look at the concordance entries.e.g. minimize. Do you see any patterns?	e. ..descended + a + N, ..descended + pref [from, for, in, into, on], ...descended + the	f. Create two original sentences that contain the collocate and <i>impact</i> , with at least one sentence using an aviation topic.	f. The aircraft start to descend rapidly due to engine failures	
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f. Create two original sentences that contain the collocate and <i>impact</i> , with at least one sentence using an aviation topic.	f. The aircraft start to descend rapidly due to engine failures															

<p>g. Choose another collocate that is adjective. Take a look at the concordance entries e.g. steep. Do you see any patterns? Notice prepositions in particular.</p> <p>h. Create two original sentences that contain the collocate and <i>descended</i>, with at least one sentence using an aviation topic.</p>	<p>g. h.</p>
<p>1. Discuss the answer (10 Minutes)</p>	
<p>Post Task</p>	<p>10 Minutes</p>
<p>Reflection</p>	<p>Ask a volunteer to express his/her experience using corpus in identifying vocabulary.</p>

Worksheet

Analyze vocabulary identified by the teacher through discovery and exploration:

1. Go to COCA Click on “Frequency List” on the left side of the page.
2. Consider the following excerpt from the article “Mismanaged descent”:
“The indicated airspeed was on target, and the approach path lights showed that the airplane was just slightly high as it descended below 500 ft, the point at which the stability of a visual approach typically is judged.”
3. What part-of-speech is *descended* in this context?

4. In the search bar, type “descended,” and choose the part-of-speech that matches the context described earlier.

5. In the search bar, type “descended”, find out the definition by clicking the POS either N or V. Which definition do you think fits the context of this excerpt?

6. In the search bar, type “descended,” Select POS N on word impact. Which synonyms could you use for *descended* in the context of this excerpt? Choose two of them.

7. Examine the collocates for *descended*. Click on a verb collocate and take a look at the concordance entries, e.g. minimize. Do you see any patterns?

8. Create two original sentences that contain collocate and *impact*, with at least one sentence using an aviation topic.

9. Choose another collocate that is an adjective. Take a look at the concordance entries, e.g. significant. Do you see any patterns? Notice prepositions in particular.

10. Create two original sentences that contain the collocate and *impact*, with at least one sentence on an aviation topic.

Review research paper

**LANGUAGE OF AIRCRAFT DOCUMENTATION:
USING A MULTILINGUAL CORPUS IN COLLABORATIVE WORK
IN LEXICOGRAPHY AND PEDAGOGY**

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Abstract. *This paper describes collaborative work by two higher education institutions in Brazil and China that joined forces to build a corpus with a view to investigating the language of aircraft maintenance documentation for teaching and lexicography purposes. The corpus consists of three languages, including English, with Chinese and Portuguese still under construction. The paper opens with an overview of language-related studies in the aircraft maintenance field, drawing attention to this specific niche and its demands. It discusses trials already performed with the English and Chinese sub-corpora, challenges faced, and the importance of task-sharing in multidisciplinary teams. It emphasizes the need to combine linguistics and professional expertise not only to develop materials for the aviation industry but also to assist the development of trainees who can experience a professional setting during their education. The corpus will be used in (among others) preparing pedagogical material for teaching not only aircraft maintenance personnel but also pilots and air traffic controllers. The corpus will also serve as a lexicographic resource for designing a visual dictionary with collocates and constructing trilingual glossaries.*

Key words: *multilingual corpus, aviation English, teaching, lexicography*

1. INTRODUCTION

Aviation English in a broad sense consists of the language used by all professionals involved in aviation. Significant attention is given to pilot and air traffic controller communication because of the implementation of the Language Proficiency Requirements (LPRs, ICAO 2010), which put forth practices related to a minimum level of English proficiency for licensing these professionals. However, this recognition often marginalizes other professional domains and genres within the area of aviation.

One such domain concerns documentation such as manuals, checklists, charts, reports, and logbooks, mostly intersecting aircraft maintenance engineers, flight dispatchers, pilots, flight attendants, and other professionals operating in airlines or private aviation companies. The use of such documentation goes beyond reading skills as professionals need to use it when

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performing tasks within or across teams. For example, engineers may need to talk to pilots about problems that occurred on a previous flight, write reports, refer to manuals to carry out aircraft maintenance, crosscheck items with cargo staff and flight dispatchers, and make decisions regarding the airworthiness of the aircraft. While this may take place in the local language in exchanges involving national carriers, multinational teams are commonly involved in such tasks (Ma, Drury, and Marin 2009). Additionally, as most documentation comes from the aircraft manufacturers, all materials are produced in English to facilitate the mobility of aircraft for transportation of passengers and cargo, relocation, and trade. This ensures that an aircraft can be repaired in another country, the aircraft's documentation can be inspected by international authorities, or the aircraft can be sold to a company based in a different country.

For this reason, some countries, including Brazil, opt to teach professionals how to handle documentation in English (Almeida and Prado 2011; Terenzi 2021). Maintenance technicians, pilots, and flight attendants (among others) are required to take English proficiency exams assessing their reading and translation skills when they apply for jobs with airlines to demonstrate their ability to read manuals and documentation (Zhang et al. 2020). While some airlines offer their employees English for Specific Purposes (ESP) courses focusing on reading aviation documents (Almeida and Prado 2011), it is common practice to include ESP modules in aviation-related courses (Terenzi 2021). These practices are especially feasible in Brazil because there are only three major airlines in the country, which ensures a concentration of standards. Moreover, written Brazilian Portuguese is in many ways similar to English, and the many cognates along with research-based strategies facilitate the teaching of reading for decades (Bocorny 2011). Finally, code-meshing is frequently adopted, particularly as regards technical terms (Friginal, Mathews, and Roberts 2020).

China, on the other hand, follows a different scenario, including the number of airlines, a multiplicity of practices, and a greater variety of aircraft in the fleet. In addition, the Chinese writing system is significantly different from that of English, thus increasing the learning challenge. In response, translation of documentation becomes the adopted practice (Liu 2020). While Ma et al. (2009) confirm the practice, they argue that there remains a large amount of texts in English, thus compelling maintenance personnel in China to use this documentation.

Misinterpretation of aircraft manuals can lead to serious consequences, and aircraft maintenance engineers and pilots must receive appropriate training and education to understand the content of the manuals in addition to having access to up-to-date and accurate information. For this reason, a corpus of aviation documentation is of utmost importance as it can enable investigations of patterns affecting policies such as proficiency exams and language standardization such as the Simplified English initiative, pedagogical materials design for in-service (Almeida and Prado 2011) and future professionals (Terenzi 2021), and translation practices found in airlines (Liu 2020).

This paper describes the first phase of collaborative work by two higher education institutions that joined forces to build a corpus with a view to investigating the language of documentation for teaching purposes (following Bhatia 2022) as well as for lexicography purposes (following Peixoto 2020a, 2020b). The corpus will be used in (among others) designing a visual dictionary with collocates (Prado and Terenzi 2022), preparing pedagogical materials for aircraft maintenance personnel (Terenzi 2021), pilots, and air traffic controllers (Prado 2019; Tosqui-Lucks and Prado 2021), and constructing trilingual glossaries. This paper presents initial investigations from the corpus under construction.

The paper is structured as follows: it opens from an overview of language-related studies in the aircraft maintenance field, drawing attention to this specific niche and its demands. It presents a comparable corpus consisting of three languages, including English, with Chinese and Portuguese still under construction. It discusses trials conducted in the English and Chinese sub-corpora, challenges faced, and the importance of task-sharing in multidisciplinary teams. It concludes by proposing future studies the corpus might promote along with the importance of combining linguistics and professional expertise not only to develop materials for the aviation industry but also to assist the development of trainees who will experience a professional setting during their education.

2. THE LANGUAGE OF AIRCRAFT MAINTENANCE

The language used in aircraft maintenance ranges from the documentation prepared by aircraft manufacturers to ground personnel involved with the loading of aircraft, mechanics responsible for the airworthiness of the aircraft, and flight and cabin crew. However, similarly to Sarmiento (2008) and Bocorny (2008), our main focus is on maintenance personnel and pilots and their interpretation of reading materials.

2.1. Aircraft Maintenance Communication-related Problems

The high-stakes environment of aviation alone justifies rigorous research of all its facets, including human factors, technical advances and error protection as well as mistakes that can lead to fatal disasters. Drury and Ma (2003) have investigated misinterpretation of aircraft maintenance manuals as a contributing factor in aircraft accidents, categorizing language errors in verbal and written communication. Among verbal errors are inadequacy of the message, different accents, and the poor quality of the public address (PA) system, while written errors include difficulty understanding documents in English and poor translation.

It is important to note that accidents are typically the result of a complex combination of factors, and the cause of an accident can be difficult to determine. However, as Mathews (2020) points out, when air crashes happen, investigations often focus on technical aspects and overlook communication problems, which “ha[ve] not been given the same systematic, consistent, comprehensive review that other human elements of human performance have received” (Friginal, Mathews, and Roberts 2020, p. 62). Indeed, Mathews (2020) considers such contributions as potentially greater than officially reported.

Regarding aviation maintenance, training and accident analysis are largely based on a toolkit known as “the Dirty Dozen” (Dupont 1997), which consists of twelve factors that contribute to human errors, placing *lack of communication* in first position. Chatzi et al. (2019) address the importance of communication both in the exchange of information within and between teams and in access to aircraft maintenance documentation. In their study, the authors link communication and trust because “[a]t the organizational level, when organizational culture supports open and free communication among all levels of employees, it is expected from them to enhance their trust levels towards each other and their organization” (p. 11). To ensure that communication and trust are equally valued in aviation maintenance, the authors suggest ongoing training focused on a framework of human errors “especially in the written forms of communication, e.g., documentation, manuals, work cards, etc.” (p. 11).

To mitigate errors, initiatives around the globe have proposed simplifying the language of manuals. One example is ASD-STE100 standards developed by a working group within the AeroSpace and Defense Industries Association of Europe (2021). ASD-STE100 focuses on a register intended for technical writers that is as precise and objective as possible. It presents suggestions that range from lexical to structural choices. Examples of attempts to reduce the risk of ambiguities include: (1) Lexical choices: The verb *fall* has the meaning of “*to move down by the force of gravity*” rather than “*decrease*” (p. ii); (2) Structural choices: “Use only the active voice in procedural writing. Use the active voice as much as possible in descriptive writing” (p. 1-3-1). Indeed, Sarmiento (2008) confirmed the low use of the passive voice, at least when combined with modal verbs, showing that it accounts for only 16.32% of the content of aircraft maintenance manuals. Moreover, these standards are often updated with the latest research on technical writing.

2.2. Studies of Aircraft Maintenance Language

Studies of the language used in aircraft maintenance are based on the specific needs of aircraft maintenance engineers (Terenzi 2014; Terenzi and Augusto-Navarro 2018; Niamsuwan 2017; Embryany and Ratmanida 2020), hence the high frequency of technical terms and specialized vocabulary. Given that most documentation is produced in English, this highly specialized language can pose a challenge for the 80% of all aircraft technicians around the world who are non-native speakers of English (Friginal, Mathews and Roberts 2020), however mitigated by strategies such as “use of Simplified English, full translation, use of an English-speaking coach, and provision of a local language glossary” (Drury and Ma 2003, p. 49).

In the two countries under study in this paper (China and Brazil), the strategies listed in Drury and Ma (2003) and designed to mitigate communication errors are applied differently. In Brazil, most documentation, including manuals, checklists, work cards, and reports are preserved in the English original. Thus most work on language is conducted through glossaries (Terenzi 2020) and the teaching of reading and writing (White, 2018), along with a surge of corpus-informed materials in the last decade resulting from academic research (Gabrielatos and Sarmiento 2006; Bocorny 2008; Zuppardo 2013; Terenzi 2021).

Using a corpus of aviation manuals, Sarmiento (2008) and Bocorny (2008) investigated modal verbs and noun phrases. Sarmiento (2008) analyzed how modal verbs signal problems as modal verbs frequently occur in sections related to caution and warning. She illustrates this observation with the statement: “Warning: Do not get hydraulic fluid on you. Hydraulic fluid BMS3-11 can cause injury to persons” (p. 2018). Similarly, Bocorny (2008) looked into noun phrases and how they can be taught to Brazilian Portuguese speakers given that the syntax of noun phrases in English and Portuguese differs. Terenzi (2021) suggests the use of corpus linguistics in teaching aviation English to future aircraft maintenance engineers and has supervised a number of papers examining the congruence between these areas. All authors justify the use of translation in ESP classes, as does Ćarapić (2022).

Borowska (2017, p. 246) cautions that “[w]hen it comes to technical terminology, it may be sometimes useful to provide learners with L1 translation in order to reduce error occurrence, but it would not work so well as a communication strategy.” Thus while translation may be a useful strategy in teaching English to aviation personnel, it can also serve as an “intervention” (Ma et al. 2009, p. 32) in order to promote better practices in professional settings.

Given that Chinese differs substantially from English in addition to the presence of a highly diversified aircraft fleet, the language needs of aircraft maintenance engineers are met

mostly through translation (Liu 2020). However, despite Liu's call for research on specialized language training for translators and aircraft maintenance engineers, including the translation of technical manuals, there is a dearth of studies in this field. Among these, Wen and Li (2011) analyzed ten popular English-Chinese translation methods based on examples from the *Chinese-English-Russian Dictionary of Aerospace*. The authors found ten translation strategies, including literal translation, free translation, and transliteration, all centered on individual English words and their equivalents in Chinese based on existing knowledge of the aviation and translation fields, not on a corpus. Yet research has shown that analyzing collocates is paramount to the understanding of subtleties that may accompany individual words forming part of particular textual features and rhetorics and therefore cultural (pre)suppositions (Trimble 1985). For example, Sarmiento (2010) investigated *can*, the most common modal verb in aeronautical manuals, along with its collocates *be*, *cause*, and *result*. She observed that these collocates flag a negative consequence that may result from a poorly accomplished task or a malfunction in the aircraft. In particular, Sarmiento highlights the importance of designing pedagogical materials for this particular target public by taking such linguistic behaviors present in manuals into account.

In a corpus of aviation English consisting of operation manuals, aviation law and regulations, aviation journal abstracts, and teaching materials totaling 350,000 words, Zhao (2014) analyzed the words *fail* (v.) and *failure* (n.), contrasting their use in the aviation corpus with that in BNC (Davies 2004), a general English corpus. This contrast leads her to claim that aviation English tends to adopt more verb nominalizations than general English because *failure* is used more frequently in the aviation English corpus than in the general English corpus. This alone would justify the need to employ specific language corpora in the teaching and translation of aviation English as these tools help draw attention to the phenomena present in that professional domain. Zhao also claims that enlarging the corpus will be necessary for further analysis.

Referring again to ASD-STE100, one of its injunctions is: "Do not use technical verbs as nouns" (p. 1-1-2). In ASD-STE100, verbs can be selected through a list of related technical words along with the segment of speech in which they should be used, as in the example below:

Non-STE: Test the system for leaks.

STE: Do the leak test of the system.

Or

STE: Do a test for leaks in the system. (p. 1-1-2)

The word *test* is approved as a noun in ASD-STE100. Although both the words *fail* and *failure* are also approved, common replacements for the verb are suggested in the manual:

Non-STE: If the instrument fails to respond, do a test.

("Respond" is an unapproved word related to different contexts)

STE: If the instrument does not operate correctly, do a test. (p. 1-1-14)

The initiative of simplifying the English used in manuals was shown to be particularly helpful to non-native speakers of English living in the United States (Chervak and Drury 2003) but not as effective in a subsequent study with personnel living in other countries, particularly Chinese and Spanish speakers (Ma et al. 2009). In the later study, Ma et al. mentioned that in such cases, translation was the most efficient strategy among maintenance personnel. The example of *fail* (v.) and *failure* (n.) given in Zhao (2014)

helps address the difficulty involved in translating phrasal structures found in manuals into Chinese. Yet the translations need to follow the same high-level standards of safety that underlie the writing of manuals. Thus there needs to be a multidisciplinary team working on translation choices as these do not imply stylistic choices but instead aim for objectivity, unambiguity, and clarity for the benefit of an international audience.

2.3. Translating Aircraft Maintenance Documentation

The lack of research may also hide problems that can arise when translating aircraft maintenance manuals from English into other languages because technical terminology and the use of jargon can pose a significant challenge for translators. In fact, translations of aircraft maintenance manuals may contain errors that can compromise the integrity of the aircraft and that of the personnel involved. Moreover, we found no studies on the impact of machine translation on the quality of translations of aircraft maintenance manuals, particularly in documents translated from English and then translated back to English.

Bai (2023) conducted a data analysis of 90 papers indexed by the Chinese scholar database CNKI (<https://en.cnki.com.cn>). The author claims that although there is a general agreement that work on aviation terminology is essential, it does not account for the complexities that exist in the air industry. Bai also suggests that in the process of translation, the translator determines not only whether a word is a civil aviation term but also its specific professional domain. Moreover, there is a discrepancy between the market, which produces a considerable number of translations, and research, which is mostly conducted by teachers and students in universities. Thus it is likely that relevant research does not converse with practice or vice-versa.

As regards research, Borowska (2017, p. 49) points out that although “national aviation languages are in use in every country [...] scientifically nothing has been done in this field apart from some lexicographic work or presentations of aviation phraseology,” which mostly focuses on radio communications between pilots and controllers. While Borowka lists the few university theses written in local languages, scientific publications need to be in a language accessible to a global audience. In fact, we could only reach the number of publications listed in the present review because we work as a multilingual team. However, we acknowledge that important publications could not be covered because we could not understand them.

Nevertheless, the studies we address here suggest that there is a need for specialized language training, including in the translation of technical manuals for aircraft maintenance engineers and students of technical translation. Regarding Bai’s mention of the problematic lack of collaboration between the market (such as airlines and translation agencies) and researchers, further research is needed if we are to fully understand the best practices for teaching the translation of aircraft maintenance manuals as well as what kinds of pedagogical materials and activities are most effective for developing these skills.

3. THE CORPUS

Corpus linguistics (CL) employs machine-readable banks of texts of specific genres for linguistic research (McEnery and Wilson 2012). While the benefits of CL outstrip the scope of this paper, we concentrate here on linguistic investigation favoring glossary building (Tagnin 2015) and pedagogical materials design (Friginal et al. 2020; Friginal and Roberts 2022).

Tagnin (2015, p. 361) addresses the importance of considering the “translator’s terminological needs,” which go beyond equivalent terms. According to the author, the translator needs to have easy access not only to terms but also to their behavioral profile, that is, their collocates and phraseology, in order to produce a natural text in the target language. The solution is to equip translators of specific languages with corpora made up of texts originally produced in the technical domain. These texts need to be authentic, which means that they need to be produced in and for the technical area in question, in both the source and the target languages. Known as comparable corpora, this type of corpus contains original texts (i.e., not translated) in at least two languages.

In a similar vein, (Peixoto 2020b) employs CL tools to propose entries and terminological definitions for an aeronautical meteorology glossary that should be descriptive rather than prescriptive. She also recommends following the norms of the target public, which may be multiple and operating in a continuum from more to less specialized. We follow her approach while observing this continuum because we are dealing with different professionals with highly specific tasks that interweave into a common goal: flight safety. For example, when checking aircraft limitations caused by certain minor failures, pilots and maintenance technicians need to discuss together the requirements of the flight plan and the aircraft status to comply with these requirements. Both teams thus need to observe details of their own specialized area so as to make a decision over whether or not it is safe to fly.

3.1. The texts

In view of the critical genre analysis proposed by (Bhatia 2008; 2017; 2022) and the need for professional language to be used as a model rather than that of idealized native speakers (Bhatia 2022), we combined forces from different technical and higher education institutions to gather documentation employed in aviation, more especially by airlines. Our team is collecting documents such as Minimum Equipment Lists (MEL), Flight Operation Handbooks, Aircraft Maintenance Manuals (AMM), checklists (such as Tasks or Quick Reference Handbooks), logbooks, and reports. These documents are handled by a wide array of professionals, including maintenance engineers, ground staff, cargo loaders, flight dispatchers, and pilots working for airlines, maintenance centers, and airports.

As described in Terenzi (2021), part of this corpus has been used in diverse studies of aircraft courses held in English in Brazil. Terenzi (2020) describes some of these investigations, including two corpus-based studies focusing on the most common verbs used in aircraft maintenance manuals, one study of similarities and differences in the use of the words *aircraft*, *airplane*, *plane*, *jet*, *jetliner*, *airship*, *airplane*, and *airliner* while drawing attention to the contexts and genres in which they appear and to the development of technical glossaries containing names (clusters) of fasteners (*nuts*, *rivets*, *screws*, and *bolts*).

Another corpus that has been cleaned up and reorganized for the current project is described in Almeida and Prado (2011). The corpus informed the syllabus design of an online course in reading for aircraft maintenance personnel in a major airline in Brazil. Currently, this corpus is being used for guidance in the compilation of an English-Chinese comparable corpus as the texts also deal with business jets (such as the Cessna Citation X) and discontinued aircraft (such as the MD-11), even though some of the documents are outdated. We are not concerned with the age of the fleet per se because maintenance personnel may refer to those documents to repair and maintain older but still operating aircraft. Rather, it is the need for regular textual updates resulting from reports

of misreading, incidents, or recalls that deserve our attention. For this reason, we categorized the texts according to their language, genre, and finally aircraft type. This allows us to upload the folders to the software according to the task at hand.

The current composition of the corpus is as follows:

Table 1 Corpus of Aircraft Documentation

Sub-corpora	Text Type	Aircraft Type	# of texts	# of words	T/TR (%)		
English	Aircraft Maintenance Manuals Aviation reports	B737 AMM	43	33,947,536	0.17		
		B737 AOM	37				
		B737 SRM	8				
		B767 AMM	42				
		B767 AOM	70				
		B777 SRM	3				
		A319 AMM	69				
		A320 AMM	8				
		A320 SRM	1,194				
		A320 TSM	35				
		A330 AMM	37				
		E190 AMM	40				
		E190 AOM	472				
		MD11 AOM	47				
		MD11 Task cards	36				
		Cessna single engine AMM	1				
		Cessna jets AOM	26				
		Helicopter manuals	48			525,711	2.12
		Airworthiness Directives	61			183,297	2.42
		Safety reports	30			992,113	1.32
Magazine articles	56	1,761,104	2.24				
Accident reports	352	2,260,878	1.17				
Handbooks (ab initio training/other kinds of aircraft)	9	1,095,723	1.81				
Chinese	Aircraft Maintenance Manuals Flight operations	B787 MEL	1	7,656,680	1.98		
		B737MAX MEL	1				
		B737 AMM	86				
		B737-6 Line maintenance manual	1				
		B737-8 Line maintenance manual	1				
		B737 AOM	167				
		A320 AOM	1				
		B737-NG Max FCTM	1				
		B737-8 QRH	1				
		B747 FCOM	1				
		B757 FCOM	1				
		B767 FCOM	1				
		B787 FCOM	1				
		A320 SOP	1				
		A330 FCTM	1				

Brazilian Portuguese	Accident reports Aviation Agency Regulatory documents	CENIPA Relatórios finais	111	221,865	4.10
		ANAC Diretriz de aeronavegabilidade	458	347,369	2.48
	Portuguese- English documents	ANAC Diretriz de aeronavegabilidade /	414	342,665	2.15
		Airworthiness Directives	381	274,798	2.01
		Relatorios de acidentes /	8	68,231	7.96
		Accident reports	8	58,595	7.22
Total			4370	49,736,565	

This list shows a comparable corpus defined as “a corpus with original texts in both languages” (Tagnin 2015, p. 361), with the proviso that the texts should belong to the same genre. These do not consist of translated texts but of originally written texts in the languages under study and with the same communicative function (Bowker and Pearson 2002). Comparable corpora are useful tools in glossary making due to the better understanding of the terms in the source texts they permit along with helping to develop a coherent and consistent translation for these into the target language. The use of comparable corpora is seen as highly beneficial in domain-specific translation processes by authors such as Bowker and Pearson (2002) and Tagnin (2015), among others

The only texts that might not fit the rule above are those listed in the bottom row, which are translated texts. However, they are not paralleled and the subcorpus does not always have corresponding texts. They represent the importance placed on communication that must come through, in the local language for domestic needs and in English for international exchanges. It can also be observed that this subcorpus holds the highest T/TR; however, the reason might be the small number of texts it consists of.

Regarding the texts, their sizes can be either a paragraph long (in the case of some airworthiness directives), or a thousand-page long (in the case of maintenance manuals). Consequently, we do not rely on number of texts to consider the representativeness of the corpus.

Challenges faced are mostly related to cleaning up the texts for trade secrets as documents of this kind constitute intellectual property. Thus we removed watermarks and any identification of aviation agencies or airline names. Some of the texts, particularly the corpus that informed the course described in Almeida and Prado (2011), were corrupted and needed repairing. Additionally, a major difficulty is the machine readability of manuals in Chinese. Since corpus linguistics software processes words by considering spaces before and after words as frontiers – something that does not occur in Chinese – we needed to use other software to segment the texts. The software we adopted is SegmentAnt (Anthony 2017). This is a user-friendly suite to which we simply upload the .txt file (or copy and paste the text in the input text box) and click on START. When the software completes the task, it creates a folder in the same location of the source text, adding the prefix “seg” (segmented) to the name of the file. The file retains a .txt extension, thus facilitating its use in most corpus linguistics tools available, including Antconc, a software suite also provided by Anthony (2022).

The input text, before segmentation, can be seen on the left side of Table 02; the output text, segmented, is on the right side of the same table:

Table 2 Samples of original and segmented texts

Unsegmented text	Segmented text
用途 空调系统控制飞机内部环境，提供给机组、旅客和设备。	用途 空调 系统控制 飞机 内部 环境， 提供 给 机组、 旅客 和 设备。

This process is important for the detection and extraction of words. As can be seen from Table xx, since Chinese characters are juxtaposed, the software cannot identify how many words are in the line. However, automatic segmentation allows us to use the software and extract words, collocates, and keywords and determine the type/token ratio (T/TR), a statistical measure dividing the number of discrete words in the text by the number of types of words (*the*, for example, is counted as one type, while the total frequency in which it appears in the corpus is counted as tokens). This helps us detect lexical variation in the corpus; that is, “the closer the result is to 1 (or 100 if expressed as a percentage), the greater the vocabulary variation” and vice-versa (McEney and Hardie 2012). Following Prado and Tosqui-Lucks (2019), we used this measure to guide the design of the corpus because the lower the result, the more repetitive and standardized the language in the texts.

3.2. Software and Reference Corpora

To process the corpus, we employ different software depending on the research we carry out. For the project conducted in China, we started using Antconc (Anthony 2022), but we also used Sketchengine (Kilgariff et al. 2014) when the size of the corpus widely surpassed the reference corpora we had available, and Wordsmith Tools (Scott 2016) to determine the T/TR of the corpus. Additionally, our choice was oriented by the language under investigation, as Antconc automatically recognizes Chinese characters without any other input. However, Wordsmith Tools needs to be set to Chinese in order to process the characters.

Corpus tools employed in the investigation of the corpus start from the extraction of data, including a wordlist with the most frequent words ranked at the top of the list, lists of two-, three-, four-, or more word clusters, concordance lines demonstrating the surroundings of the word or cluster under scrutiny, and keyword extraction with the use of a reference corpus. Based on these data extractions, the researchers may select and further analyze patterns. Given that we are in the corpus building phase, we need to run constant trials in the corpus to check the validity of the data as well as the number of documents we still need. We also verify the T/TR of the corpus to determine whether we need more texts of the same variety or a greater variety of documents. For example, we found that we had enough aircraft operational manuals because the T/TR of this genre was low.

We used Antconc for most trials as the tool offers wordlists, clusters, concordance lines extractions, and T/TR analysis. Problems with Antconc started when our corpus became too big and we needed a larger reference corpus, which is when we then decided to use SketchEngine for its catalog of corpora. We did this because we are interested not only in technical terms but also in the presence of patterns typical of the genre, such as

discourse markers (Zupparado 2013), modal verbs (Gabrielatos and Sarmiento 2006), and noun phrases (Bocorny 2008). As these words or clusters are more common than in the reference corpus, they can be extracted when both corpora are contrasted.

3.3. Extracting Keywords and Collocates

We now address the importance of collaboration within and between teams. One of the teams is made up of a linguist and several English language undergraduate students learning how to use CL tools for lexicography and pedagogical purposes at a Sino-Foreign institution based in China. They have the ability to ask appropriate questions related to language and to identify linguistic patterns that answer those questions. Another team consists of a linguist and several undergraduate aircraft maintenance students at a federal institution based in Brazil. These students are learning to become mechanics, and because they are already exposed to the terminology of the area, they can validate the terms selected by the first team. The third team, still under formation, will consist of a linguist who teaches translation of aviation English at an aeronautical university in China and will be responsible for validating the English-Chinese translations proposed by the first team. We also have one linguist specialized in aviation English and CL, working in the aviation industry, who oversees the collaborations.

The purpose of extracting keywords is merely to facilitate the lexicographic work. When extracted automatically, wordlists reveal the most frequent words in the corpus. However, this may hide technical words that are significant to the area. As most words used in any text are function words, these are salient in any wordlist, pushing many content words down the list. Consequently, we use a reference corpus to provide a contrast with the corpus under study and then filter the words that are typical of the latter. Still, the software will simply calculate the statistical properties of those words that are more common in one corpus than in the other. We used this list to manually select those that we found to be more significant to our study, examining them in concordance lines and in the co-text (a widened-out view of the word or phrase in the source text). This selected list thus becomes a candidate list and is further assessed by another team.

After being examined by the other team, the list goes back to the team of language students who will now identify the behavioral profile of the term; that is, they will investigate clusters and collocates of the term in question. The search for collocates also helps pinpoint terms in the source language that do not demonstrate clear equivalence (Tagnin, 2015). Examples are the words *screw* and *bolt*, *smoke* and *fumes*, or *airplane* and *airliner*, which have equal or similar equivalents in Portuguese and often confuse Brazilian learners of English (Terenzi and Pizzi 2020). Li, Zhu, and Zhou (2018) also point out problems affecting aviation English words when they have a different meaning depending on which word they collocate with, such as *gear* in *landing gear* and *gearbox* or *generator* in *oxygen generator* and *AC generator*.

Ongoing analyses are carried out at every stage of the compilation to ensure the quality of the corpus. Given that the genres included in the texts may be repetitive, we need to make decisions regularly regarding documents to be added to the corpus as well as other aircraft types to orient the selection of manuals.

The next step is to use reference corpora in both languages to detect keywords in the corpora under study. As explained earlier, keywords will be selected as candidate terms and sent to different institutions. Once endorsed by the professional and technical teams,

these candidate terms will compose the visual dictionary (Prado and Terenzi 2022) and the trilingual dictionary.

While keyword extraction is not essential in the design of language learning activities specific to aircraft maintenance and operation, knowing what terms are key in the aviation industry is paramount to novice English teachers willing to work in the area. White (2018) refers to ASD-STE100 as a tool that equipped him for learning the terminology necessary to teach aircraft maintenance technicians to write reports. We strongly believe that combining ASD-STE100 with a corpus of aircraft documentation such as the one we are developing will afford the aviation community greater language awareness and thus improve safety standards.

4. DISCUSSION AND CONCLUSION

We have worked on corpus linguistics and aviation English individually since at least 2010. However, this is our first opportunity to be involved in a common project, combining forces and efforts to promote work collaboratively. Ideally, our final projects are a visual dictionary, a trilingual glossary, and pedagogical materials. However, it is the process described here that warrants most of our attention as researchers and teachers in higher education institutions. The process allows for collaboration between at least two countries, Brazil and China, in two different educational settings. On the one hand, enabling future language professionals to explore authentic resources with real needs fosters competences for future world markets, particularly in international settings. On the other hand, when teachers expand their pedagogical frontiers beyond the classroom, they foreground intercultural communicative competences and the use of English as an international language, while students' multilingual capabilities are enhanced and valued.

As to the corpus, the context of aircraft maintenance (be it engineers or language professionals such as translators) calls for teaching World Englishes for Specific Purposes (WESP, i.e. Bhatia 2022) and for the delineation of discourse community norms as well as differentiation in the performance of experts and novice rather than focusing on terms such as language learners and native speakers (Tarone 2005).

Because “[c]ommunication implies community and membership is mediated with the meaning of the text” (Widdowson 1998, p. 7), no language professional should stop at the word level and consider only decontextualized discrete units. While corpus linguistics studies take frequencies and therefore numbers as a starting point, they are not restrained by them. High frequencies indicate patterns prevalent in a given community, and linguists search for possible explanations of such patterns. A corpus of aircraft maintenance manuals, accident reports, and circulars (among other documents) may help visualize linguistic phenomena that would not be accessible to the naked eye. In turn, the phenomena under scrutiny can inform materials that can facilitate and improve the work of the professionals involved. Pedagogically, they can inform curriculum design, materials development, and assessment, while lexicography can enhance the quality of glossary and dictionary making.

Moreover, a corpus of this kind can boost future research in readability measures similar to Zhang et al (2020). With translated texts, we can also carry out analysis in line with Carvalho and Rebecchi (2021), who checked the readability of both source and translated texts in the public health domain with a view to understanding whether these

texts succeeded in reaching a lay audience. However, in this study, we do not deal with a lay audience but with a variety of professionals from different settings, as suggested in Peixoto (2020a).

Furthermore, the corpus can also be employed in studies such as Drayton (2022), who combined two aviation genres documented standard phraseologies and real ATC communications to investigate how technical the vocabulary of radiotelephony is. In addition, this corpus can be contrasted with radio communications so as to verify the extent to which pilots borrow terms from aircraft manuals.

We have illustrated the first and perhaps most important phase of a collaboration between educational institutes in Brazil and China with the aim of not only training future professionals, but also informing better practices regarding aviation safety. We also call for future collaborations in educational and professional settings as a means of continuously developing projects that address real needs in the industry.

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Review research paper

CONSIDERATIONS FOR AVIATION-RELATED ENGLISH TEACHERS CAPACITATION: A REFLECTION ABOUT TRAINING AVIATION-SPECIALIZED ENGLISH INSTRUCTORS

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Abstract. *Teaching aviation English has become popular worldwide due to the language proficiency requirement test that some aviation professionals must meet. Since International Civil Aviation Organization (ICAO) established that mandatory recommendation, some instructional experts in the civil aviation industry have provided courses, workshops, and books to ease this knowledge to key aviation personnel which include pilots, and air traffic controllers, mainly. Almost 25 years have passed since ICAO implemented such a compulsory standard in its Annex 1; nevertheless, some teachers still have difficulties teaching this specialty of English for Specific Purpose because there are few suggestions for teaching this specialty of English. ICAO pays much more attention to the language proficiency requirement than to teaching specific aviation related English, as something that air radiotelephony personnel tend to study before meeting the language proficiency test. A reflection about capacitating teacher of aviation-related English, its tendency, and what is needed, will be discussed in the present article to go deeper on this matter and contribute to language safety. This is a qualitative research based on updated trends on this type of English for Specific Purpose, and on questionnaires submitted to English teachers from different countries who have engaged themselves in teaching in this important field.*

Key words: *Aviation English, aviation English teachers, aviation capacitation*

1. INTRODUCTION

Teaching different types of aviation English (AE) is something that still requires research to be aware of the nature of this matter. Teaching AE focusing on pilots' cognitive needs is the market that has most expanded beyond boundaries worldwide. In the first place, due to the language proficiency requirement (LPR) test that all those involved in the aviation radiotelephony must meet, which is a recommended standard by the International Civil Aviation Organization (ICAO). The LPR is to determine the test taker's English level; it means the number or degree assigned to the pilot, air traffic controller (ATCO) or aeronautical station operator (ASO) accordingly to the ICAO's criteria established in Annex 1, which guarantees safety in all air radiotelephony communication, especially among Non-Native English Speakers (NNS). That is why it is much more common to see AE language teaching providers present in almost every country where the aviation-licensed NNS needs to develop their speaking and listening skills for being tested.

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Nevertheless, there are other aviation workers who are NNS, working in areas that require mastering some knowledge of this global language in the form of English for Specific Purpose (ESP) for their daily duties. According to other authors (which will be referred ahead), they are talking about English for: flight dispatch, airport environment, aviation law and regulations, search and rescue, aviation medicine, aircraft maintenance (including remote piloted aircraft systems also), cabin crew, simulator instructors, ground staff (landside and airside), among others. It is a good idea to develop all these AE course contents, but what about the aviation-related English instructors' course content?

This article, undoubtedly, will highlight some issues that English teachers pursuing in the teaching-learning process of AE (whichever its type is), need to know in order to fulfill this task. It is well-known that teaching methods and approaches are always under research with the purpose of providing improvements to new trends in education, and ease learners acquire expertise, abilities, and language awareness.

2. STATEMENT OF THE PROBLEM

In recent times, many scholars and authors have been discussing the need of planning and designing content for several specialties of AE courses. Nevertheless, it is significant to emphasize qualifications of English teachers or instructors to fulfill the task effectively. When talking about AE teaching, instructors need to see this type of knowledge as a specific occupational purpose learning-teaching process.

The previous paragraph means that those professionals committed to teaching AE with no-field experience, besides mastering activities, methods, and approaches for a language class, nowadays, they also need to attain aviation-related issues and keep reading or researching in such fields. On the other hand, if the instructor is an aviation professional or technician pursuing to teach AE, they must learn and develop teaching skills, activities, and tools to perform them in the classroom.

It is essential to focus, not only on the content or syllabus of AE courses intended for the specialized workforce, but also on the capacitation of the instructors who will impart this subject. They need to get trained with the purpose of easing the students to develop four vital skills of language (writing, speaking, reading and listening comprehension), considering, naturally, the instructors' profile, experience in determined aviation or aeronautical fields and their familiarity or willingness to get familiar with specified contexts.

The objective of this article is to make known some considerations concerning the specialized aviation-related English teachers' capacitation. It means, what a content course should contain, as well as identifying the suitability of professionals' qualifications pursuing teaching this type of ESP.

3. LITERATURE REVIEW

3.1 Aviation English: types, focus, and differences

Let us first discuss some definitions of aviation English. First, it is "the covering of prescribed, highly constrained set of phrases to be used insofar in all radiotelephonic communication between controllers and pilots..." and "the use of natural English or 'plain language' – to be used in aviation situations where the standard phraseology is either non-existent or insufficient" (Estival and Farris 2016, 2). Additionally, another

definition of this term refers to the modality of English for specific purposes that encompasses the communication of pilot/ATC in the aviation environment, specifically in flights involving the standard phraseology and plain English grammar structures, definitions, and terminologies used in the aviation field (Barbosa 2016, 97).

In summary, AE is then, a term that refers to the use of the English language, not only by pilots and ATCOS, but also mechanics, meteorologists, flight attendants, and others. In other words, this term does not only refer to the type of English that many aviation workers need to communicate, and follow instructions and indications, but to interact with travelers, likewise (Trosqui-Lucks and de Castro 2022, 11). At the same time, these two authors define aeronautical English as “the language used solely by air traffic controllers and pilots when controlling international traffic, and the object of the language proficiency requirements addressed by the International Civil Aviation Organization (ICAO) on the latest Doc 9835”. Similarly, an additional comment quotes out that “aeronautical English” is considered as a subcategory of AE (Monteiro and Fox 2022).

At this conjunction, analyzing all these five concepts provided by the authors, it is possible to summarize that the term that best encompasses this field-related term is AE, which provides a broader view of the same; meanwhile, the second clearly tends to wrap the type of English language that ATCOs and pilots require. So, having this idea in mind, the authors infer that as far as there are many areas in aviation, the same could happen with AE.

A new question rising is which are the categories or types of AE? Is it that many? Today, some experts mention the need for AE:

1. Aircraft maintenance technicians,
2. Ground staff (landside and airside),
3. Flight and simulator instructors,
4. Facilitation inspectors,
5. Security (AVSEC) police,
6. Airport immigration police,
7. Search and rescue officers,
8. AE instructors/teachers.

All these types of technical or specific courses are needed because they are different in content and needs (Roberts 2022), (Bullock 2019). Broader researches and analysis of aviation-field English highlighting the real personnel’s AE needs are necessary too (Soto 2022 58). Even though the biggest effort is still being made for pilots and secondly for ATCOs, it is imperative to comprehend AE as something that goes beyond radiotelephony uses, but the airport and other aviation spheres.

AE, conversely, should never be confused with the LPR test. This last term can be understood as a diagnostic-summative evaluation in which the test taker is assigned the number that indicates the mark, degree, or quality of language safety for a bi-directional communication purpose, it means between ATCOs and pilots when using the radiotelephony (Soto 2022, 48). That is why the LPR explanation given must be well comprehended to avoid ambiguity and incongruity because some ab initio instructors tend to confuse them, generating a cliché in relation to the LPR test and its acceptable levels. For that reason, many pilots take for granted that AE final focus is that learners pass this test.

3.2. Challenges in teaching Aviation-related English and the Aviation English Teachers' capacitation

Many questions arise from the preceding segment, and one of them is if instructors are aware of what this umbrella term called Aviation English means. What and how to teach? Is it that important to establish the similarities or differences among them, so the instructor may know what they will face?

According to research on AE teaching made at the most prominent pilot school in Algeria, the researcher found out that English was being taught by an instructor having no ESP training, though holding a license degree in English. The teacher during the interview said that she had been teaching English (first, as the second language, and then aviation-oriented) in such academy for 9 years (Assassi 2017 215-216). She can be described as an English teacher who imparts English classes empirically with material printed by publishing houses and based on her experience gained through the years passing by.

The interviewee commented at that time about teaching AE under the form of ESP. To begin, the instruction approach: communicative approach in the case of English for pilots is recommended. The second thing said was to focus more on teaching specialties, which can be understood as imparting topic modules intended for pilots. Nevertheless, this principle can be extended to other aviation-related workers when learning English. It means that content designers must consider what topics to include in a syllabus for each type of ESP or EOP.

In the same paperwork presented, the author mentioned that some aviation professional in charge of providing flight instructions to student pilots in Algeria have received their education (other different than teaching) in their home country, as well as in European countries like France and Switzerland. Those instructors stated that their English level is intermediate or operational (Assassi 2017 209). In a few words, they have enough operational experience but limited AE language domain. Yet is this characteristic enough for someone who teaches AE? Absolutely not. It is important for instructors to know how language works within the aviation setting.

As an example, let us consider two scenarios: first, an NNS aircraft accident investigator (a former SAR officer) discussing in English with other NNS international colleagues (compound by former pilots, and aircraft maintenance technicians) when analyzing air crash pieces of evidence during such process. The second scenario could be the same group drawing conclusions for the final report. With this in mind, in light of the foregoing, who could have been the most appropriate AE instructor for this group of professionals? In short, the one who has a good command of context-based vocabulary on this expertise, and the required skills to teach.

Circular 323 remarks that AE instructors need to demonstrate a series of attributes like linguistic skills, previous experience with ESP teaching, and familiarity with the field (by education or research); concisely, English language teaching skills and operational understanding or experience (ICAO 2009 25); even though ICAO does not certify any AE teachers/instructors training so far. Here again, in this paragraph, there are two things to highpoint: aviation and teaching familiarization, which are initiatives that some scholars have been formulating in terms of ESP teachers' training, and curriculum development, as it is possible to visualize two types of AE instructors: educators with a degree of English teaching, and the others who are aviation operational professionals.

Another challenge for teachers/instructors of these varieties of AE is to act as field expert researchers at the same time. They must revise and update the curriculum content,

teaching materials, tests, constantly in accordance with the feedback and learners' needs (Er and Kırkgöz 2018 196). For instance, the role of the teacher is not merely to act as a classroom lecturer, but he/she needs to keep sourcing new trends for best practices and evaluating the quality of the instruction. From this point of view, let us see how complex AE teachers' role is.

All the comments mentioned before give the idea that training an AE teacher/instructor takes a long time, because one of the considerations for teachers' capacitation is to equip them with skills on how to satisfy learners' target language needs (Bullock 2018 72), assuming that teaching AE aims for a long-life communicational skills development for occupational uses and not only for an exam – or just to pass it (Bullock 2019).

4. METHOD

4.1. Research design

This qualitative research was made, in the first place to learn the opinions of teachers of English that have taught this language to aviation professionals. To obtain data, a questionnaire was made. The questionnaire consisted initially of 16 questions of multiple options or selections. In other words, there were questions in which the participant had to choose only one option, as long as in other questions, it was possible to select up to three options. The first part of the questionnaire initially consisted of 10 questions, and the second part had 6 questions.

In the first part of the online form, the participants would select the option related to their education, occupation, domain of English, experience in teaching AE, challenges and weakness encountered when teaching. In the second part, participants would select options that reflected their point of view on what and how an aviation-related English teacher capacitation should be. The questionnaire was uploaded as a Google survey form for three weeks in which 26 volunteers would answer it.

4.2. The participants

Total of 26 respondents from countries like Russia, Bulgaria, Brazil, Argentina, Colombia, Venezuela, Panama, Mexico, Turkey, Uruguay, France, the United Kingdom, and the USA. Twenty of them are education professionals with university titles that certify them as teachers of English, independently if having a CELTA certification (in some countries it is not necessary to teach English at school or another institute including those associated with AE). Out of those 20, 17 teachers have postgraduate studies. Among the respondents, there were also two pilots (both with bachelor's degrees, but one with postgraduate), one pilot (without university education), two air traffic controllers (both with additional university careers and postgraduate studies), and one aviation technician (with secondary instruction). Almost all of them have been involved in teaching AE, but one of the pilots has never taught – the one with postgraduate studies, yet willing to.

It is well known that teachers of AE do not have an aeronautical license which indicates their LPR level but based on their career development, teaching experience for many years, and aviation-context work environment, they have acquired much about AE language.

4.3. Research instrument

Initially, the researcher-made questionnaire had 16 questions. The link of the Google questionnaire form was sent to five teachers of English: one Bulgarian, two Venezuelans, one Brazilian, and another from France. Some of them provided suggestions to improve the quality of the redaction of the questionnaire. This step worked as validation. In this first run, the 5 samples were chosen in order to obtain the Cronbach alpha reliability ($0.8 > \alpha \geq 0.7$). 5 questions with almost the same orientation or that seemed to be biased were deleted, resulting 11 queries. So that the final Cronbach alpha was “ $\alpha = 0,78$ ”.

$K= 11$		$\Sigma Vi^2= 3,1$	$1,1*0,71=0,78$
$K-1= 10$		$Vt^2= 10,7$	$\alpha= 0,78$
$K/(K-1)= 1,1$		$\Sigma Vi^2/Vt^2= 0,29$	
		$1-(\Sigma Vi^2/Vt^2)= 0,71$	

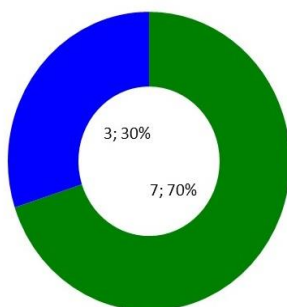
Questionnaire Cronbach Alpha

After the revision of the final questionnaire consisting of 11 questions, it was run again for two more weeks obtaining in total the rest of the 21 additional respondents, to sum 26, which was mentioned before. Of them, only 10 samples were selected for the discussion.

5. RESULTS AND DISCUSSION

As far as this research paperwork follows the qualitative paradigm, the researcher provides explanation of the findings.

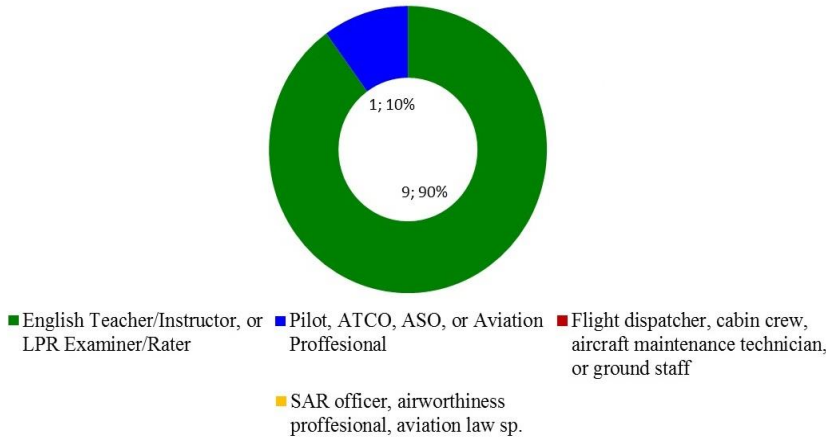
5.1. Question 1: What is your highest educational level?



■ Postgraduate (Specialization, Master's, or Ph.D.) ■ College or Bachelor (3+ years) ■ Technical ■ Secondary School

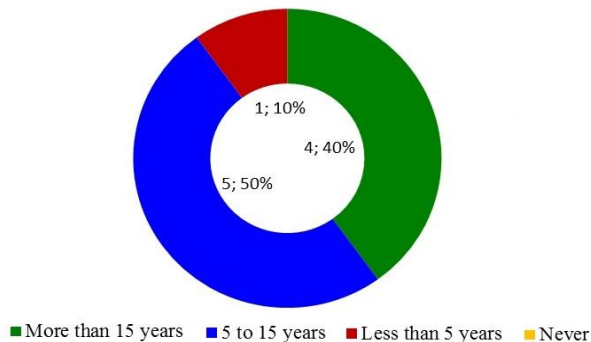
Capacitation beyond the bachelor's degree is something of particular concern, especially to get updated on the new trends in the teaching-learning process. Nevertheless, for someone who does not know much about aviation, pursuing studies in aviation areas could help to familiarize much more with the field of specialization. This is an added value for those who teaches aviation English.

5.2. Question 2: What is your occupation?



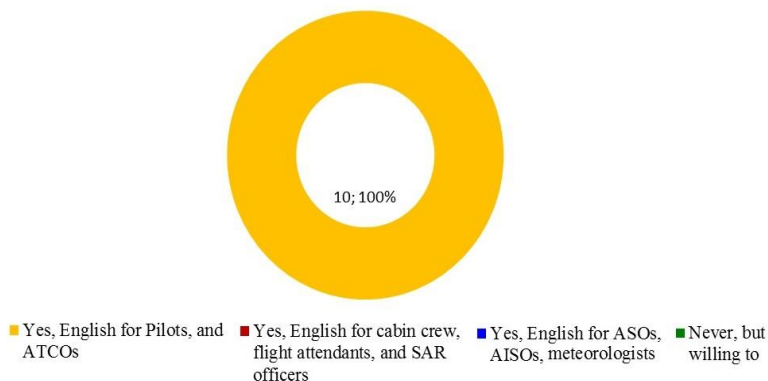
Most of those involved in teaching aviation English mentioned being teachers or educators, it means that they possess domain strategies for the teaching-learning process. Nevertheless, this task is not limited to educators, but other aviation professionals who have taken the initiative of teaching AE.

5.3. Question 7: How many years have you been involved in aviation English teaching?



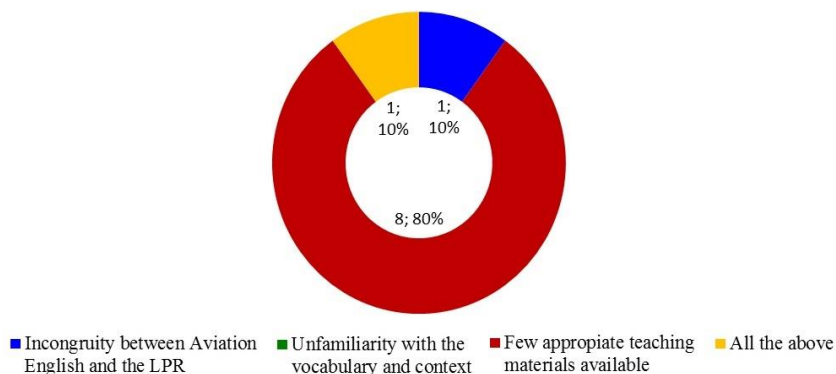
Experience in teaching helps getting mature in classroom activities, and is also a tool to learn and get familiar with what is less known, especially in aviation contexts. Working as an AE teacher can provide the educator inputs of the aviation-related field, to analyze what the learners need. At the same time, an educator can develop skills for content design.

5.4. Question 8: Have you ever taught Aviation English?



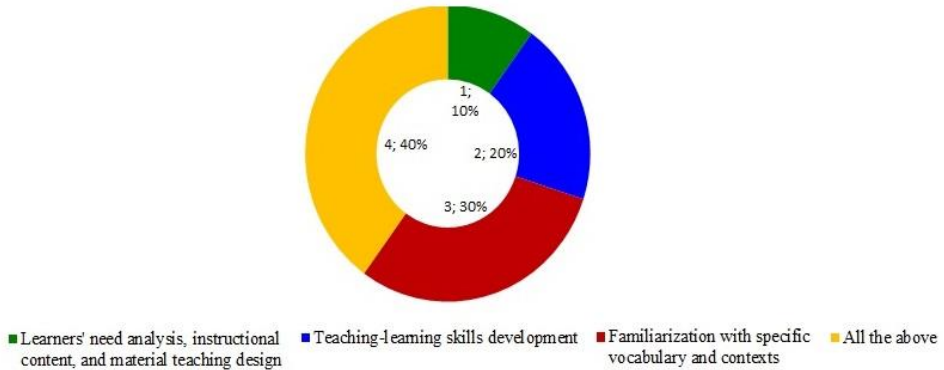
This was a multiple selection question in which all of the respondents choose the first choice. It demonstrates how popular English for air radiotelephony is; making this type of English the most customized in the teaching market, due to pilots, and ATCOs must meet the LPR test established by the ICAO. The aim of teaching English to pilots and ATCOs is also to make them able to communicate in international radiotelephony context to maintain safety during the flight.

5.5. Question 9: What has been the biggest challenge when you are teaching aviation English?



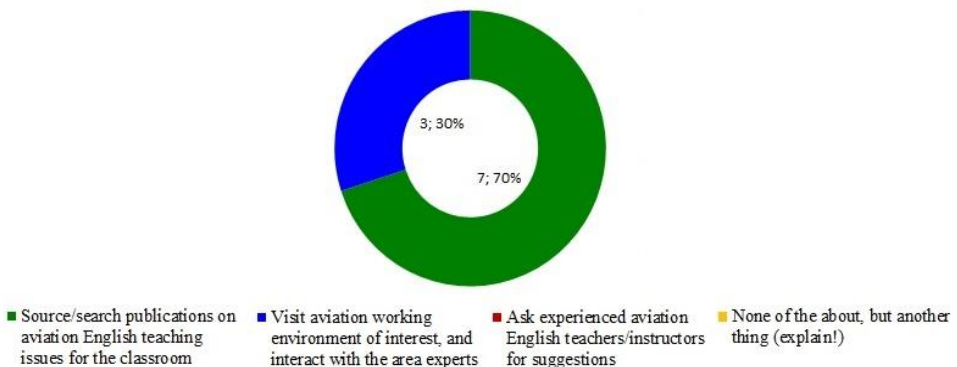
There are publishing houses that have published teaching materials of AE intended for pilots, that is why these books are much more common to find. It is curious, however, that instructors consider there are few of them. Even though there exist books of AE for pilots and cabin crew, instructors are not that familiar with them. Those materials could indeed be appropriate, but instructors require capacitation on how to prepare their lessons from the existing resources.

5.6. Question 12. What should the initial aviation English teachers' capacitation course contain?



From the pedagogical or andragogic way of view, a teacher must consider developing skills in familiarization with specific vocabulary and context, as well as teaching-learning techniques to put them into practice in the classroom. Moreover, for those who tend to create their own teaching material, additional competences should be taken into account, for example learners' need analysis.

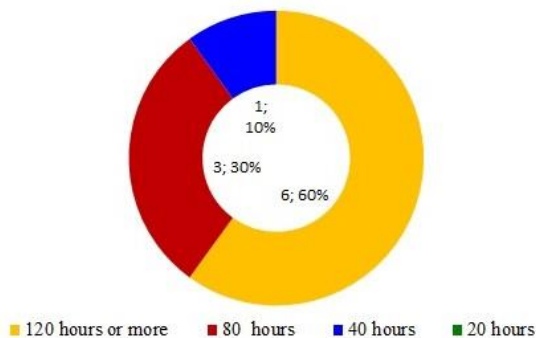
5.7. Question 14. What should an aviation English teacher/instructor do in order to get familiar with specific contexts?



The familiarization training of an AE teacher/instructor includes finding out resources. S/he needs to exploit additional and supplementary tasks for learning what is still unknown. Of course, the options chosen are the two quickest ways to learn, anyhow there are more things an AE teacher/instructor could do in furtherance of obtaining more adds to ease the aviation-related lessons to learners.

5.8. Question 15. - How long should the initial aviation English teachers course be (including terms familiarization, teaching skills, learners' need analysis, content and material design)?

The length of the AE teachers' course is going to depend on their actual needs. In pursuance of a course containing all the aspect mentions in question 12, extended training is recommended. The idea is to capacitate teachers in everything for a successful AE class. An initial training could be of 120 hours, meanwhile recurrent in areas where weakness is detected, or when a new trend shows up, could be approximately of 20 hours.



6. CONCLUSION

Many AE teachers/instructors nowadays have developed their competencies by getting involved with experience within the field, reading about the topic and assisting in workshops for a better improvement of their skills. This experience can help today to better design content for AE teachers' courses, especially to focus in teaching any type of AE. Hence, for training teachers/instructors of this specific ESP, the initial course should be well extended because it does not only mean developing certain teaching-learning skills, methods, approaches, or familiarization with aviation context, but integrating them with the learners' needs. It is not the same to teach English for search and rescue, in comparison with English for air radiotelephony communication.

The findings can also indicate that teachers/instructors should have at least an undergraduate formation (as a minimal profile requirement), and have an area of interest on aviation for teaching that branch of ESP. Naturally, teachers/instructors can use the existing teaching books that are in the market at present, but they should be able to adapt those contents and edit their instructional material to help learners better comprehend the new linguistic inputs. Those involved in teaching this specialized type of ESP should perform actions of sourcing, and read about what they can do in the classroom, an aspect that could be included in their capacitation.

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Review research paper

INVESTIGATING THE CONSTRUCT OF AERONAUTICAL ENGLISH LISTENING TESTING: A QUALITATIVE ANALYSIS OF THE ICAO RATING SCALE

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Abstract. *Since the publication of the International Civil Aviation Organization (ICAO)'s language proficiency requirements, a number of different tests have been developed and implemented around the world to assess pilots and air traffic controllers' proficiency in English. Meanwhile, researchers have questioned the clarity and appropriateness of the policy, and the reliability of tests (e.g., Alderson 2011; Douglas 2004; Emery 2014). ICAO has recently acknowledged that, over the years, multiple interpretations of the policy have led to practices that might undermine the meaningfulness of aviation English tests (ICAO 2022b). However, the ICAO Rating Scale remains as the instrument to be used in assessing pilots and air traffic controllers' aeronautical language proficiency. Thus, this article explores the construct of aeronautical English listening tests stated in the comprehension descriptors of the ICAO rating scale, as well as the elements of the other descriptors that may inform the definition of this construct. An in-depth content analysis of the rating scale was conducted by using the "interview technique", as described by O'Leary (2021). Results provide useful information for the development of listening tests in the aeronautical context. A better interpretation of the construct informed by the policy can help to reduce the differences among test implementations around the world and further contribute to more standardized and meaningful testing practices.*

Key words: *language testing, ICAO rating scale, listening comprehension, construct definition*

1. INTRODUCTION

In 1998, after a tragic accident that led to 349 fatalities in 1996, India submitted a working paper asking the International Civil Aviation Organization (ICAO) Assembly to consider the lack of language proficiency of pilots and air traffic controllers (ATCOs) with a high degree of priority (Popa 2019). In 2003, the ICAO Council adopted the Amendment 164 to the Annex 1 (entitled *Personnel Licensing*) to the Convention on International Civil Aviation, requiring pilots and ATCOs to "demonstrate the ability to

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speak and understand [emphasis added] the language¹ used for radiotelephony communications” (ICAO 2022a: paragraph 1.2.9.1). For pilots and ATCOs to demonstrate their speaking and listening abilities, they need to be tested, unless they are native speakers of English. Appendix 1 to Annex 1 includes a set of *holistic descriptors*, which describe five abilities which pilots and ATCOs should demonstrate, and, Attachment A includes the *ICAO Language Proficiency Rating Scale*, which details six analytic criteria (pronunciation, structure, vocabulary, fluency, comprehension, and interactions) for the six proficiency levels mentioned in paragraph 1.2.9.1 (level 1, *Pre-elementary*, to level 6, *Expert*).² For pilots and ATCOs to meet the ICAO LPRs, they must demonstrate compliance with the holistic descriptors and the ICAO Operational Level (Level 4), detailed in the rating scale. In other words, to be allowed to fly internationally or to control international flights, pilots and ATCOs should be awarded at least level 4 in all six criteria of the rating scale. To help civil aviation authorities and testing service providers to develop tests to assess pilots and ATCO’s aeronautical language proficiency, ICAO published, in 2004, the first edition of the DOC 9835 – *Manual on the Implementation of ICAO Language Proficiency Requirements* (ICAO 2004). In that time, Douglas argued that in the aviation English context it would be very important to have a clear picture of the language which is being assessed, as well as a “clear, complete and unambiguous definition of the construct³ to be measured in relation to the purposes for which the measurement is being made” (Douglas 2004: 250). After the publication of the ICAO language proficiency requirements (LPRs), the so-called *aviation English tests* (which I call *aeronautical English tests* [see Tosqui-Lucks and Silva 2020]) started to be developed around the globe by different organizations. In 2010, Alderson (2010) conducted a survey on aviation English tests for pilots and ATCOs and concluded that “little or no confidence can be had in the meaningfulness, reliability and validity of several of the aviation language tests currently available” (p. 63). He then interrogated if the ICAO scales are explicit, relevant, and adequate.

In 2016, during the 39th session of the ICAO Assembly, Brazil (2016) presented a working paper inviting the Assembly to review the ICAO LPRs, arguing that the construct underpinning the policy is unclear and under-represented. The response to this working paper was that “it [the working paper] did not present sufficient evidence that existing language proficiency requirements posed a safety threat”, and that “the need to revise the language proficiency requirements could be considered once additional implementation data was [*sic*] collected through the different initiatives of ICAO” (ICAO 2016, para. 35.155). Unfortunately, over the years, as ICAO itself remarked, multiple

¹ A note to the ICAO Annex 1 paragraph 1.2.9 explains that the language to which paragraph 1.2.9 refers may be English or the language “normally used by the station on the ground” (ICAO 2022a, p. 1-17). In practice, the language that is commonly evaluated is English, because when pilots and ATCOs use the language used by the station on the ground, they usually use their native language. As another note to paragraph 1.2.9 informs, pilots and ATCOs who demonstrate expert language proficiency (e.g., native speakers) do not need to be formally evaluated.

² Due to a limitation on the number of words of this article, the holistic descriptors and the rating scale were not included in the appendix, but Annex 1 is available at <https://elibrary.icao.int/home>.

³ A construct can be understood as “the theoretical entity that the test developers and test users intend the test to measure, the quality or qualities of the test takers we wish to make inferences about” (Douglas 2010: 33).

interpretations of the policy have led to practices that might have undermined the meaningfulness of aviation English tests (ICAO 2022b). The lack of clarity, appropriateness, and fairness of the ICAO policy, as mentioned by many (e.g., Douglas 2004, 2014; Emery 2014; Kim and Billington 2016; Kim and Elder 2015; Knoch 2014; Read and Knoch 2009), most likely contributed to such consequences. In spite of the criticism towards the policy, the LPRs have not changed and are still what Contracting States need to comply with, unless ICAO is notified of any differences between national regulations and the ICAO requirements. Thus, as Emery (2007) points out, “every testing programme and test instrument developed to measure the language proficiency of aviation operations personnel will employ the Rating Scale and Holistic Descriptors in each of the 190 ICAO member states” (p. 1). Therefore, test developers need to have a clear and deep understanding of the ICAO policy. Knoch and Macqueen (2020) argue that policy analysis “is a crucial aspect of work that needs to be completed before an assessment is developed or adopted” (Knoch and Macqueen 2020: 87)

Many aspects related to the policy could be explored. As Wodak (2006) points out, “there are obviously many relevant research issues and a variety of genres and public spaces where a precise linguistic analysis of oral, visual, or written texts will provide differentiated knowledge on aspects of language politics/policies” (Wodak 2006: 170). The focus of the present study is to investigate one specific aspect of the ICAO policy: the construct of the listening in isolation test represented in the ICAO rating scale. Criterion 3 of the ICAO test design guidelines⁴, which were developed by the International Civil Aviation English Association (ICAEA) in partnership with ICAO, recommends that “test instruments need to contain tasks dedicated to assessing listening comprehension separate from tasks designed to assess speaking performance” (ICAEA n.d.). It is necessary to assess listening in isolation in order to minimize a major threat to the validity of the interpretations and uses of tests scores: *construct irrelevant variance*, “that is, the test is too broad and contains excess reliable variance associated with other distinct constructs as well as method variance making items or tasks easier or harder for some respondents in a manner irrelevant to the interpreted construct” (Messick 1989: 14). ICAEA points out that “assessing comprehension at the same time as speaking compromises the validity of the result for comprehension”, and that “test developers need to be mindful of ensuring interference of ability in other skills do not unfairly influence the assessment results” (ICAEA n.d.). The ICAO test design guidelines adds that “this means test-takers are required to listen to prescribed recordings and then complete follow up comprehension tasks. Such tasks could be on paper, require test-takers to summarise information or answer prescribed written questions asked orally or provided on a test paper/computer screen” (ICAEA n.d.). It is important to point out that, although it is necessary to assess listening in isolation, the assessment of interactive listening is also essential in this context, as most of the listening performed by pilots and ATCOs happen as part of an interactive conversation between them. Field (2020) argues that the listening processes employed in conversations might be different from those employed when listening to a recording, and also more cognitively demanding. Lam (2021) also

⁴ At the time this article was written, this author was participating in the meetings of the ICAO Exploratory Group - Language Proficiency Requirements (EG-LPRs/03), which was created to revise the ICAO test design guidelines in order to have them published by ICAO as a handbook.

emphasizes that interactive listening “needs to be assessed outside the boundaries of (receptive) listening tests” (Lam 2021: 20). However, the focus of the present study is on the construct of a test that aims to assess listening in isolation. Hence, the research questions that this study addresses are the following:

Research Question 1 (RQ1): *What is the listening in isolation construct represented in the descriptors for comprehension detailed in the ICAO Language Proficiency Rating Scale?*

Research Question 2 (RQ2): *How may the descriptors for the other criteria help to define the construct of a test to assess listening in isolation?*

2. LITERATURE REVIEW⁵

The ICAO rating scale was developed by a committee appointed by ICAO known as the Proficiency Requirements in Common English Study Group (PRICESG). ICAO (2010) describes that “this study group brought together, from Contracting States and international organizations, operational and linguistic experts with backgrounds in aviation (pilots, air traffic controllers and civil aviation authority representatives), aviation English training and applied linguistics” (para. 1.4.2). Estival, Farris, and Molesworth (2016) observe that this study group did not include language testing expertise. McNamara, Knoch, and Jason (2019) adds that this group “was dominated by representatives from English-speaking nations” (McNamara, Knoch, and Jason 2019: 19).

The ICAO policy has been criticized from a number of different perspectives. One of the main criticisms is related to the fact that native speakers do not need to be formally evaluated. Many authors (e.g., Borowska 2017; Douglas 2014; Estival, Farris, and Molesworth 2016; Kim 2013; McNamara, Knoch, and Jason 2019; Monteiro 2019; Read and Knoch 2009; Trippe 2018) argue that native speakers should have their ability to communicate evaluated. This test should assess their ability to accommodate to non-native speakers when necessary by, for instance, using simpler vocabulary or by speaking at a slower rate. I believe the main reason why Brazil’s paper to ICAO was not accepted was because the working paper highlighted that it was necessary to assess native speakers of English. Having the paper accepted would mean that some countries would have to spend money and time to assess and train their pilots and ATCOs. Asking pilots to pay a two-dollar fee to receive a new license with an “English Proficient” endorsement, as the United States were doing (Alderson 2011) would not be enough, and this is probably why the United States voted against the Brazilian request. As it has been argued, the politics involved in this context have a huge impact on the decisions that are made, and their agenda is often hidden (see Aragão 2018; Alderson 2011).

Another recurrent criticism to the ICAO policy lies in the fact that the guidelines advice that the focus of the language assessment should be on plain English proficiency, without taking into consideration the incorrect use of phraseology or the lack of technical knowledge of operations (ICAO 2010). DOC 9835 does mention that it is important to adhere

⁵ This literature review focuses on studies that discuss the construct of aeronautical English tests for ATCOs and/or licensed civilian pilots. For a through discussion on the appropriacy of the ICAO scale for assessing *ab initio* pilots, see Treadaway (2022), and for a detailed comparison between the assessment of civilian and military pilots in the Brazilian context, see this issue’s article by Silva (2023).

to ICAO standardized phraseology. It also acknowledges that 70% of the radiotelephony speech acts do not comply with it. However, although a somewhat contradicting note to Annex 1's Appendix 1 says that "the language proficiency requirements are applicable to the use of both phraseology and plain language" (ICAO 2022a), the policy does not require phraseology to be assessed. DOC 9835 explains that "it is acceptable that a test contains a scripted task in which phraseology is included in a prompt, but the test should not be designed to assess phraseology" (ICAO 2010: 6.3.2.9). Korean pilots and ATCOs who participated in Kim's (2013) study believe that the non-observance of radiotelephony conventions plays a more important role on safety than proficiency in plain English. Indeed, underutilization of phraseology has shown to increase problems in communication (e.g., Howard 2008). Additionally, DOC 9835 says that "the test should not be designed to evaluate technical knowledge of operations" (ICAO 2010: 6.3.2.10). This is understandable, as the tests should not ask questions such as "What are the separation minima for aircraft being vectored for an ILS approach?" or "Describe the different flight modes of the A320 flight control system" (ICAO 2010: 6.3.2.10). However, from analysing indigenous assessment criteria (the criteria adopted by domain language users to assess the effectiveness of communication [Jacoby and McNamara 1999]), Aragão (2018) argues that ATCOs consider non-linguistic elements, such as psychological aspects and operational knowledge, to be significant contributors to effective communication. McNamara, Knoch, and Jason (2021) also point out that "experienced pilots and air traffic controllers know that technical knowledge is an inextricable part of language use" (McNamara, Knoch, and Jason 2021: 17). Research findings (e.g., Kim 2013; Knoch 2009, 2014; Aragão 2018; McNamara, Knoch, and Jason 2021) support Douglas's (2001) notion of specific purpose language ability in Language for Specific Purposes (LSP) testing, which he defined as "a construct that results from the interaction between specific purpose background knowledge and language knowledge" (Douglas 2001: 50). Unfortunately, it seems that, as Knoch, Deygers, and Khamboonruang (2021) point out, when the ICAO rating scale was developed, indigenous assessment criteria were not taken much into consideration.

Not much is known about the development and validation of the ICAO rating scale (Kim and Elder 2009; Knoch 2009) and few studies have been conducted to investigate the construct represented in the ICAO rating scale. Knoch (2009) conducted a validation study to investigate how test developers, administrators, and raters viewed the rating scale. Although participants responded that they were generally satisfied with the rating scale descriptors, their responses to open-ended questions indicated a range of problems that stakeholders identified in the ICAO scale. For comprehension, the most cited problem was that "comprehension could not be accurately measured in a scale designed to assess speaking performance" (Knoch 2009: 31). This confirms Pfeiffer's (2009) findings. Pfeiffer (2009) investigated inter-rater reliability in a German speaking test, and found it to be low, the lowest being for comprehension. She points out that "the ICAO descriptors are often incomplete and therefore need amendment, however with comprehension the user could easily have the impression that the rating scale designers have not properly thought about the pertinency of the features to be included into the scale and hence a scale user could be seduced not to take the scale too seriously" (Pfeiffer 2009: 56). She adds that "the wording of the level descriptors for comprehension is not very enlightening. According to my judgement, they are possibly the least well thought out in the entire rating scale" (Pfeiffer 2009: 57).

Similarly to Knoch (2009), Garcia (2015) interviewed very experienced ICAO LPRs test developers and raters to investigate their perceptions on the ICAO policy in general and, more specifically, on the ICAO rating scale. She reported a number of recurring themes criticized

by participants, such as the presence of contradictions within the policy, the lack of fit between the policy and the target language use (TLU) domain, the need to assess pilots and ATCOs ability to communicate effectively (not only proficiency in plain English), and the importance of following standard phraseology. Participants were asked to discuss the strengths and weaknesses of the ICAO rating scale descriptors for each criterion. One participant complained about the fact that comprehension is only one category out of six in the rating scale. He argued that “it makes us think that comprehension is less than 20% of the overall ability to communicate on the radio. It is not, it is 50%, at least”. Indeed, according to Feyten (1991), as cited by Buck (2001), it seems that people spend about 45% of the total time of communication using listening skills. The ICAO requirement itself emphasizes this importance by saying, as mentioned, that pilots and ATCOs must demonstrate their ability to do *two* things: *speak* and *understand* the language used for radiotelephony communications. The same participant in Garcia (2015)’s study advocated that comprehension “is an extremely important, if not more important, part of the overall proficiency construct in this case (Garcia 2015: 38). For him, comprehension should have its own rating scale. This belief is upheld by Knoch (2009) when she points out, as mentioned, that using a scale that was designed to assess speaking in order to assess comprehension is problematic. However, differently from Knoch’s (2009) results, that suggest that comprehension of cultural subtleties seems irrelevant, participants in Garcia’s (2015) study pointed out that the main strength of the comprehension descriptors was this reference to comprehension of cultural subtleties. One of the participants even argued that this reference should have been included in other levels of proficiency, not only in level 6. Monteiro’s (2019) findings uphold Garcia’s (2015), in opposition to Knoch (2009). Monteiro (2019) investigated the proficiency construct of intercultural radiotelephony communications in aviation and specified the communicative demands of pilots and ATCOs within a construct framework. She points out that pilots and ATCOs perceive that intercultural factors can impact the safety of flights. The results of her study indicate that the ICAO policy does not include important components of the construct. Monteiro (2022) highlights that

Effective RT communications require competencies not addressed in prevailing models of communicative competence. They do require specific purpose language ability and background knowledge (AE), the need to speak English as a *lingua franca* and to adjust to the communicative needs at hand (ELF), to accommodate and negotiate sociocultural differences (ICA), and to solve misunderstandings between members of different cultures, while at the same time sharing responsibility for successful communication (IC). And most importantly, this applies to both first language (L1) speakers of English, and those who speak English as a second (L2) or additional language. (Monteiro 2022: 239)

As seen in this brief literature review, there has been a quite prolonged debate on the appropriacy of the ICAO policy. As Knoch, Deygers, and Khamboonruang (2021) point out, the rating scale “includes features of construct irrelevance and construct underrepresentation of the TLU domain” (Knoch, Deygers, and Khamboonruang 2021: 618). We can then conclude that “the ICAO policy has not met its intended goals, and these seem unlikely to be met in the future unless the policy and its underlying construct are modified” (Kim 2013: 108).

3. METHODS

3.1. What Document was Selected?

Merriam (1988) argues that “documents of all types can help the researcher uncover meaning, develop understanding, and discover insights relevant to the research problem” (Merriam 1988: 118). Policy documents carry valuable information that can offer insights as to how such policies should be implemented.

The source of data for this study was the ICAO Rating Scale, included in the Annex 1. When planning this project, the intention was to analyse not only the rating scale, but the whole ICAO policy, including the Holistic Descriptors and the rest of ICAO Annex 1 (ICAO 2022a), the second edition of the ICAO DOC 9835 (ICAO 2010), the ICAO Circular 318 (ICAO 2009), *Language Testing Criteria for Global Harmonization* (ICAO 2009), and the ICAO test design guidelines (ICAEA n.d.). However, the ICAO Annex 1 is the only document that has the Standard and Recommended Practices (SARPs), or, in other words, the requirements that Contracting States need to comply with, a decision was made to only analyse this fundamental document. The manual, the circular, and the test design guidelines contain guidelines, which are very relevant but unfortunately not mandatory for Contracting States to follow. However, when discussing the results, I occasionally mention DOC 9835. However, the most relevant piece of the policy to define the construct is the rating scale, which every test instrument developed to assess pilots’ and ATCO’s ability to speak and understand the language used in radiotelephony communications must employ.

3.2. What Method was Applied?

The method applied in this qualitative study was document content analysis. Bowen (2009) defines document analysis as “a systematic procedure for reviewing or evaluating documents” (p. 27), which “entails finding, selecting, appraising (making sense of), and synthesising data contained in documents” (p. 28). This procedure is recommended by Cardno (2018) to analyse the organization and content of educational policy documents. As Cardno (2018) explains, “as a research tool, policy document analysis is a method for investigating the nature of a policy document in order to look at both what lies behind it and within it” (Cardno 2018: 625). In spite of the traditional quantitative nature of content analysis (Merriam, 1998), the focus of the present analysis was not on the quantitative aspects of the policy content, such as frequencies, but on its qualitative nature, such as “the presence or absence of certain content characteristic” (George 2009: 145).

Bowen (2009) explains that document analysis is an iterative process which includes superficial skimming, careful reading, and interpretation. This document analysis was done through a careful reading of the document, and involved focused re-reading and review of the documentary data. Thus, an “interview technique”, as described by O’Leary (2021), was conducted to interrogate the rating scale as if the text was being interviewed. As O’Leary (2021) points out:

In ‘interviewing’ your documents, you are, in a sense, treating each document as a respondent who can provide you with information relevant to your enquiry. The questions you ask will be dependent on the nature of your enquiry and on the document type. As with an interview, you will need to determine what it is you want to know, and whether your document can provide you with the answers. You then need to ‘ask’ each question and highlight the passages in the document that provide the answer. (O’Leary 2021: 200)

Having RQ1 in mind, the following questions were asked towards the document:

- Q1) *What are the common elements in the comprehension descriptor levels?*
 Q2) *What elements are not recurrent among the comprehension descriptor levels?*
 Q3) *How do the comprehension descriptors differentiate the different levels?*
 Q4) *Do the comprehension descriptors make a difference between a test to assess interactive listening and a test to assess listening in isolation?*

While highlighting the common elements in the comprehension descriptors and comparing the differences between the levels, some other questions arose:

- Q5) *What may be considered a common topic?*
 Q6) *What may be considered a concrete topic?*
 Q7) *What may be considered a work-related topic?*
 Q8) *What accents or varieties may be considered sufficiently intelligible for an international community of users?*
 Q9) *What can be considered a linguistic complication?*
 Q10) *What can be considered a situational complication?*
 Q11) *What is an unexpected turn of events?*
 Q12) *What is meant by nearly all contexts?*

4. RESULTS AND DISCUSSION

4.1. What is the Listening in Isolation Construct Explicitly Stated in the ICAO Language Proficiency Rating Scale?

The common element in the comprehension descriptors from level 3 to level 5 is that they talk about comprehension in common, concrete, and work-related topics. Another common element is that the speaker might be confronted with a linguistic or situational complication or an unexpected turn of events. Table 1 shows the differences between comprehension in these three levels. We can see that comprehension in common, concrete, and work-related topics seems to be easier, as comprehension of test takers who will not even pass the test (level 3) is often accurate and comprehension of level 4 test takers is mostly accurate (although it allows a few misunderstandings). When the speaker is confronted with a linguistic or situational complication or an unexpected turn of events, the descriptors seem to be harsher on test takers. For test takers to pass the test (get a level 4), although it might take them some time or the use of clarification strategies, they seem to need to understand the communication, as only level 3 test takers may fail to understand.

Table 1 Comprehension differences among levels 3 to 5

Level	Comprehension in common, concrete, and work-related topics	Comprehension when the speaker is confronted with a linguistic or situational complication or an unexpected turn of events
Extended 5	Accurate	Mostly accurate
Operational 4	Mostly accurate	May be slower or require clarification strategies.
Pre-operational 3	Often accurate	May fail to understand

We can see that the difference between comprehension in levels 3, 4, and 5 is how accurate the comprehension on common, concrete, and work-related topics of the test taker is (level 5, accurate, level 4, mostly accurate, and level 3, often accurate). For levels 3 and 4, the scale includes an observation that for comprehension in common, concrete and work-related topics to be either mostly accurate (level 4) or often accurate (level 3), the accent or variety used should be sufficiently intelligible for an international community of users. The absence of this observation in the level 5 descriptors may imply that, at this level, comprehension must be accurate even when the accent or variety used is *not* sufficiently intelligible for an international community of users.

As mentioned, during the analysis, questions 5 to 12 above were risen. Some of these questions had been raised in previous work. Douglas (2004), for example, asked two important questions: “Does the phrase ‘common, concrete, and work-related topics’ refer to three topic categories or one?” and “how is the intelligibility of the various English dialects and accents in use internationally to be determined?” (Douglas 2004: 250). Knoch (2009) suggested that this reference to intelligibility for an international community of users could be deleted from the rating scale because it would be problematic to select speakers that would satisfy this requirement. Garcia (2015) recommends that this issue should be further researched.

The descriptors for level 6, on the other hand, instead of describing comprehension in the two mentioned scenarios, talk about comprehension *in nearly all contexts*. What is meant by “nearly all contexts”? Is it more than comprehension in both mentioned scenarios? Apparently, yes, as the word *all* implies. But why *nearly* all contexts? What contexts are not included?

DOC 9835 explains that

Work-related context can accommodate different interpretations. A narrow interpretation would aim to closely replicate radiotelephony communications, including the extent of plain language needed in unusual, unexpected or emergency situations. A broad interpretation of the holistic descriptors and Rating Scale would aim to elicit plain language on various topics that are related to radiotelephony communications or aviation operations, without replicating radiotelephony communications specifically. ... Both interpretations are valid. (ICAO 2010: 6.2.8.9)

Not having the “right” interpretation to be followed determined by ICAO gives too much flexibility for test developers to define the construct they want to measure. The fact that the DOC 9835 allows for different interpretations contributes to the significant differences in test design which have led to uncertainties in relation to what tests measures, what results mean, and overall quality of tests worldwide (ICAO 2022b). Unfortunately, although this issue of having a possibility for either a broad or a narrow interpretation was frequently brought to discussion in the ICAO EG-LPRs/03 meetings mentioned in Note 3, this will remain an unresolved problem for some time to come.

Furthermore, some elements in the comprehension descriptors are only mentioned in one of the levels. These are: the reference to the ability “to comprehend a range of speech varieties ... or registers”, which are only included in level 5, and the ability to comprehend linguistic and cultural subtleties, which are only mentioned in level 6. The issues in the ICAO rating scale reported here, such as the terminology problems, inconsistencies, and lack of definition of concepts do not only happen in this scale.

Alderson et al. (2004) has also listed similar problems regarding the Common European Framework. These problems make it difficult to fully understand the construct to be measured, but, within our limitations, we can conclude that a test that aims to assess pilots and ATCOs listening comprehension in isolation must include the abilities listed in Table 2. The comprehension descriptors seem to apply to the assessment of both listening in isolation and interactive listening.

Table 2 Listening construct represented in the comprehension descriptors

Item	Construct	Applicability
1	Comprehension on common, concrete, and work-related topics	Levels 3, 4, 5
2	Comprehension when the speaker is confronted with a linguistic or situational complication or an unexpected turn of events.	Levels 3, 4, 5
2.1	In assessing 1, include accents or varieties sufficiently intelligible for an international community of users.	Levels 3, 4
3	Ability to ask for clarification when comprehension fails	Level 4
4	Comprehension of a range of speech varieties (dialect and/or accent) or registers.	Level 5
5	Comprehension in nearly all contexts	Level 6
6	Comprehension of linguistic and cultural subtleties	Level 6

Test developers need to have clear definitions for the concepts that are not defined. An analysis of the ICAO documents that include guidelines for the implementation of the ICAO LPRs, such as the ones mentioned in 3.1, may help to further understand ICAO's intentions. The second edition of DOC 9835 includes an explanation of the rating scale descriptors from level 3 to 6 which may be useful in this process.

4.2. How May the Descriptors for the Criteria other than Comprehension Help to Define the Construct of a Test to Assess Listening in Isolation?

Questions 5 to 12 were addressed towards the rating scale in order to investigate how the descriptors for the other criteria could help to define the construct of a test to assess listening in isolation. The rating scale does not provide a clear answer to questions 5, 6, and 7, as it does not explain what can be considered a common, concrete, and work-related topic. However, these terms also appear in the descriptors for vocabulary from level 3 to 5. In the vocabulary descriptors, the frequency in which vocabulary range and accuracy are sufficient to communicate on common, concrete, and work-related topics should be evaluated. According to Knoch (2009), "reference to 'common, concrete and work-related topics' is not clear to stakeholders as the whole test should be in the aviation domain" (Knoch 2009: 43). DOC 9835 states that

Context is an important consideration in communications, and an individual's language proficiency may vary in different contexts. This holistic descriptor limits the domain of the communicative requirements to work-related topics; that is, air traffic controllers and pilots are expected to be able to communicate about issues in their field of professional practice. Language proficiency should not be limited to standardized phraseology and should range across a relatively broad area of work-related communicative domains. (ICAO 2010: 4.5.3)

Very high lexical familiarity seems to be essential for good comprehension (Bonk 2000). According to Rost and Brown (2022), word recognition is the basis of spoken language comprehension, and lexical knowledge seems to be, in second language listening, “the most significant variable contributing to listening proficiency” (Rost and Brown 2022: 241). Thus, test takers’ lexical knowledge should also be assessed in a listening test. Elements of the vocabulary descriptors, such as knowledge of vocabulary used on common, concrete, and work-related topics, of idiomatic vocabulary, of vocabulary used on a wide variety of familiar and unfamiliar topics, and of nuanced vocabulary can inform the definition of the construct of a test to assess listening in isolation. It is important to point out that the purpose of the present study is to try to understand the construct represented in the ICAO rating scale, not to evaluate or criticize it. However, it is good to mention that criticism (e.g. Garcia 2015; Knoch 2009; Pfeiffer 2009) has been made in relation to the fact that the rating scale descriptors include idiomatic and nuanced vocabulary since communications between pilots and ATCOs should always be “clear, concise, and unambiguous”, even when using plain language (ICAO 2010: 4.3.4). Knoch (2009), for example, argues that “any references to idiomatic language should be deleted as this is not appropriate in the TLU domain” (Knoch 2009: 43). I have also strongly argued that “idiomatic vocabulary should never have been included in the rating scale” (Garcia 2015: 22). Today I think differently because unfortunately real-life communications are not always according to standards. As a matter of fact, ICAO acknowledges, as mentioned earlier, that 70% of the radiotelephony speech acts do not comply with the recognized standards (ICAO 2010). Thus, I argue that if idiomatic expressions are used in real-life radiotelephony communications, as the findings of Prinzo, A. Hendrix, and R. Hendrix (2009) indicate, they should be included in a test that intends to reflect the language used in real-life. Although I believe pilots and ATCOs should have the ability to comprehend idiomatic vocabulary assessed, they should be encouraged not to use them when speaking. Also, the vocabulary descriptors for level 6 may help to understand what the comprehension descriptors for level 6 mean by “a wide variety of familiar and unfamiliar topics.”

The descriptors for pronunciation, which include both segmental and suprasegmental features of pronunciation, may help to address question 8. From level 2 to 6, “pronunciation, stress, rhythm, and intonation” might be “influenced by the first language or regional variation”. However, the pronunciation of a level 2 test taker is heavily influenced, while the pronunciation of a level 6 might be influenced or not. The main difference between the levels is the frequency in which pronunciation interferes with ease of understanding. This frequency may “usually” (level 2), “frequently” (level 3), “only sometimes (level 4), “rarely (level 5), or “almost never” (level 6) interfere with ease of understanding. The accents and varieties that may be considered *sufficiently* intelligible for an international community of users, as mentioned in the comprehension descriptors for levels 3 and 4, might be the ones whose pronunciation either rarely (level 5 in pronunciation) or almost never (level 6 in pronunciation) interferes with ease of understanding. Thus, a recording used in a listening test recorded by a pilot or controller who was awarded level 5 or 6 in pronunciation might be considered an accent or variety that is sufficiently intelligible for an international community of users, whereas recordings which were recorded by pilots or controllers who were awarded level 4 in pronunciation might be considered within a range of speech varieties, which is mentioned in the comprehension descriptors for level 5. Test developers may even consider having pilots or controllers who were awarded 3 or less in pronunciation to make the recordings

for the listening test, since ICAO's report on the implementation of the LPRs showed that 32.25% of member states had not provided information about their implementation status (ICAO 2013). However, it is important to point out that "although strength of foreign accent is indeed correlated with comprehensibility and intelligibility, a strong foreign accent does not necessarily cause L2 speech to be low in comprehensibility or intelligibility" (Munro and Derwing 1999: 305).

Moving on, what could be considered a linguistic complication (question 5 from Table 2)? As linguistic is a broad term, many linguistic factors may be considered a linguistic complication. The interference of pronunciation, stress, rhythm, or intonation with ease of understanding may be considered linguistic complications. As Rost and Brown (2022) argue, "unexpected speaker accents, an unfamiliar phonotactic pattern, rhythm and intonation systems, length of input, number of speakers, rapid speech rate and lack of pauses, and connected speech phenomena (reductions and assimilations)" may pose challenge to linguistic processing (Rost and Brown 2022: 249). Listening to unfamiliar or uncommon vocabulary may also cause a linguistic complication. Even factors related to the fluency descriptors may add a complication, as "lack of 'orality' features (such as pauses and redundancy)" may also pose challenges. Furthermore, lack of knowledge of syntax may also be considered a linguistic complication. Rost and Brown (2022) argue that for a listener to have a detailed comprehension of a message, "a thorough syntactic processing needs to take place" (Rost and Brown 2022: 242). The descriptors for structure talk about basic and complex grammatical structures. Although there has been a discussion whether the scale's reference to complex structures reflects the real-world of radiotelephony communications (e.g., Prado 2015), there is no doubt that knowledge of grammatical structure plays an important role in comprehension. Rost and Brown (2022) list complexity of grammatical structures as one factor that poses challenges to second language listeners.

Now, what is a situational complication (question 10)? According to DOC 9835, "it is during complications in aviation that communications become most crucial, with a greater reliance upon plain language" (ICAO 2010: 4.6.6). The descriptors for vocabulary and interactions may shed some light on this issue. First, when the descriptors for vocabulary mention common topics, they imply topics might also be uncommon topics. They also talk about unfamiliar topics. Differently from uncommon topics, which may be understood as topics that do not happen frequently in radiotelephony communications, unfamiliar topics are the ones that pilots and ATCOs were not familiar with. When topics are uncommon or unfamiliar, the situation will likely be more difficult to solve. The level 4 descriptors for interactions talk about the ability to deal adequately with apparent misunderstanding. The occurrence of a misunderstanding could also be considered a situational complication. The topic of question 7 ("an unexpected turn of events?") may also be considered a possible situational complication, as it describes a situation in which events do not occur according to what is expected. DOC 9835 points out that

One of the more challenging events in all communications, including those involving the use of a second language, is when the unexpected happens. Human Factors experts have emphasized the threat of letting our expectations hinder our interpretation of reality. Sometimes, a complication or an unexpected event can lead to a communication breakdown. (ICAO 2010: 4.5.3)

The opposite of "an unexpected turn of events", according to the level 3 descriptors for structure and interactions, seems to be "predictable situations." Moreover, if a

response is not *immediate*, *appropriate*, or *informative* (as the descriptors for interactions from level 3 to 5 describe), a situational complication may arise.

Table 3 shows a summary of elements test developers may consider when developing a listening test to assess pilots and ATCOs' listening in isolation, which was based on the present analysis of how other descriptors other than comprehension may help to inform the definition of the construct.

Table 3 Elements test developers may consider when developing a listening test to assess pilots and ATCOs' listening in isolation

Include pronunciation, stress, rhythm, and intonation both influenced and not influenced by the first language or regional variation
The accents and varieties that may be considered <i>sufficiently</i> intelligible for an international community of users, as mentioned in the comprehension descriptors for levels 3 and 4, might be the ones whose pronunciation either rarely (level 5 in pronunciation) or almost never (level 6 in pronunciation) interferes with ease of understanding
Include a range of speech varieties (one parameter might be pilots and ATCOs who were awarded level 4 or below in pronunciation)
Include the assessment of the ability to understand vocabulary used on common, concrete, and work-related topics, idiomatic vocabulary, vocabulary used on a wide variety of familiar and unfamiliar topics, nuanced vocabulary
Comprehension of a wide variety of familiar and unfamiliar topics may help to understand what the comprehension descriptors for level 6 mention as comprehension "in nearly all contexts"
A linguistic complication might be caused by: <ul style="list-style-type: none"> ▪ Interference of pronunciation, stress, rhythm, or intonation, a linguistic complication on ease of understanding ▪ The use of complex structures ▪ The presence of uncommon or unfamiliar vocabulary ▪ Inappropriate phrasing and pausing, slowness in producing language, use of too many fillers, or use of inappropriate discourse markers or connectors
An unexpected turn of events is one situational complication, and might be caused by a misunderstanding, or by a response which is not immediate, appropriate, or informative, among other possibilities.
Include predictable situations (to contrast with unexpected situations)

5. CONCLUSION

Investigating the construct of the ICAO rating scale is only one piece of the puzzle to define the construct of a test to assess listening in isolation. Investigating the policy is one of the five different areas test developers of Language Assessments for Professional Purposes (LAPPs) should consider when developing a test, as Knoch and Macqueen (2020) recommend. They should also analyse the needs and motivations of test takers, test requirements needs, the availability of resources for test development, administration, and validation, and, most importantly, the characteristics of the TLU domain. Furthermore, the present study only analysed part of the policy, as the focus was on the rating scale.

Knoch and Macqueen (2020) suggest including in the policy analysis, an analysis of the policy environment and of the professional registration environment.

As Upshur and Turner (1995) point out, “in general, ... rating scales present major problems of reliability and validity” (Upshur and Turner 1995: 5). Not differently, the ICAO rating scale is problematic and revision should be considered by ICAO (Aragão 2018; Garcia 2015; Knoch 2009; Pfeiffer 2009). The fact that the rating scale was developed to assess speaking makes it difficult to be used to assess listening (Knoch 2009). As Garcia (2015) suggests, the development of a specific rating scale for the assessment of comprehension seems to be necessary. Future studies of the ICAO rating scale can inform its revision and contribute to the development of a more valid and reliable scale to assess speaking and of a new rating scale to assess listening. Researchers and test developers could look into other dimensions of construct as described by Knoch and Macqueen (2020): the perceived construct (e.g., how stakeholders understand the construct in the rating scale) and the operationalized construct (what is actually being assessed by tests). Further analysis of other aspects of the ICAO policy may offer insights into understanding problems related to the implementation of the ICAO LPRs. For example, researchers and test developers could also look at aspects related to the construction of the policy, its context, and impact, including its strengths and concerns. Moreover, researchers and test developers could also investigate the values embodied in the policy (see Shohamy 2001). Furthermore, they could conduct an evaluation of the policy using the policy evaluation framework provided by Knoch and Macqueen (2020).

The purpose of this study was to improve the understanding of the ICAO policy in order to inform the development of tests that aim to assess pilots and ATCOs’ listening in isolation fairly, as required by the ICAO test design guidelines (ICAEA n.d.). Having a common understanding of the construct may contribute to reduce the variation of quality of tests worldwide. To conclude, test developers need to keep in mind that

In such a ‘high-stakes’ environment, language testing needs to be accountable to the stakeholders in the aviation industry. State regulators, managers of airline and air traffic management service providers, trainers, pilots and controllers, and ultimately, the flying public, need to be able to trust global language assessments and to have confidence that licensed operations personnel are competent communicators in the English language. As those who are obliged to learn and use English on the frequency, pilots and controllers deserve to have their language proficiency assessed fairly, and to know that their counterparts around the world have been assessed according to the same standard. (Emery 2007: 1)

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Review research paper

INVESTIGATING ENGLISH FOR AVIATION: AN IN-DEPTH ANALYSIS OF AVIATION ENGLISH TEXTBOOKS - REVIEW

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Abstract. *The purpose of this research study was to conduct an in-depth analysis and compare three popular aviation English textbooks that are used in the training of pilots and air traffic controllers. Additionally, it also aimed to investigate the pedagogical principles underpinning each of the three textbooks. The three selected textbooks were published by three internationally renowned publishers and were chosen because they are widely used in aviation training schools and made as main references. This research study adopted a content analysis method by employing a three-level analysis framework as suggested by (Littlejohn 2011). In addition, Ellis's (2005) list of ten instructed language learning principles were referred to draw conclusions regarding the pedagogical principles underpinning of the three textbooks. The findings suggested that Textbook 3 was the most favourable, Textbook 1 was the second most favourable, and Textbook 2 was the least favourable. Textbook 3 was found to promote more language initiations, more higher order mental operations, more interactions, more authentic inputs, and more opportunities for output productions than Textbooks 1 and 2.*

Key words: *aviation English, content analysis, textbook*

1. INTRODUCTION

The impetus of ICAO English language proficiency requirements stemmed from the fact that many aircraft incidents and accidents have occurred due to language inaccuracies and misunderstandings between pilots and ATCOs (ICAO 2010; Barbieri 2014). Infamous tragic incidents resulting from such errors include the deadliest aviation disaster in history that occurred in 1977 on the island of Tenerife (Spain) resulting in 583 deaths (Kennedy 2008), the 1996 collision between Kazakhstan and Saudi Arabian airlines in Charkhi Dardi, India that killed 349 people (Lahoti 1997), and two aircraft accidents that occurred in Indonesia in 1997 with 234 casualties and in 2012 with 45 fatalities (National Transportation Safety Committee of Indonesia 1997).

Therefore, it is imperative that pilots and ATCOs be able to understand and communicate in English fluently and accurately to prevent similar accidents from

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happening, as well as to ensure smooth and safe operation of flights. To help achieve this goal, aviation English teachers need to facilitate English teaching and learning by selecting appropriate resources. To this end, there are a selection of English aviation textbooks published by reputable publishers that are available on the global market, including *Aviation English* by Macmillan (Emery and Roberts 2008), *Flightpath: Aviation English for Pilots and ATCOs* by Cambridge University Press (Shawcross 2011), *English for Aviation for Pilots and Air Traffic Controllers* by Oxford University Press (Ellis and Gerighty 2008), *Cleared for takeoff: Aviation English Made Easy* by AE Link Publications (Mariner 2015), and so on. It is crucial that aviation English teachers select the most appropriate textbook for use in their classroom, hence, the drive for this study and the need for the textbooks to be subjected to careful analysis and evaluation.

There is limited prior research on aviation English textbook analysis and evaluation. This paper reports on a research analysis of three English aviation textbooks, purposively chosen because their use is prevalent as primary reference in a large number of aviation training schools. The selected textbooks were published by Macmillan, Cambridge University Press, and Oxford University Press.

2. LITERATURE REVIEW

2.1. Textbook Analysis and Evaluation

Textbooks have long been a part of English language learning instruction with English Foreign Language teachers often consulting textbooks when preparing lessons (Hutchinson and Torres 1994; Richards 2001; Zhang 2017), to access a syllabus, learning materials, language samples, and a variety of tasks and activities (Cunningsworth 1995; McGrath 2002; 2016). However, there are competing viewpoints on textbook use in EFL contexts; some are concerned that prescriptive use could lead to the elimination of teachers in the classroom (Swan 1992), while others agree (Cunningsworth 1995; McGrath 2002 2016) that in the field of English for Specific Purposes (ESP), where the majority of English teachers have no background knowledge of the subject, e.g. medicine, business, aviation, maritime, etc., a textbook written by expert authors from respective fields, specifically for the area is beneficial.

Prior to prescribing and adopting the use of a textbook, it is prudent to conduct an analysis and evaluation to ensure that the text meets the needs of the course. Experts in textbook analysis have various proposals on how to analyse and evaluate textbooks (Cunningsworth 1995; McGrath 2002; 2016; Littlejohn 2011; McDonough et al. 2013; Tomlinson 2011). There are generally three types of textbook evaluations commonly applied, depending on the phases and purposes of selection: pre-use, in-use/whilst-use and post-use evaluation (Tomlinson 2011). Pre-use evaluation is conducted prior to using the textbook with a focus on predicting the potential value of the textbook (Tomlinson 2011). In-use/whilst-use evaluation takes place whilst the text is being used in the classroom, where the teacher or researcher observes what students are doing whilst utilizing the textbook and records what works well and the challenges encountered, etc. (McGrath, 2016; Tomlinson 2011). Post-use evaluation is conducted after the textbook has been used and involves collecting information from the student and teachers to understand their perceptions of the textbook, and to examine the usefulness of the materials and the students' results after using the textbook (McGrath 2016; Tomlinson 2011). This information commonly involves a questionnaire, interview, journal, or

evaluation sheet (Tomlinson 2011, p.259). None of these methods of textbook analysis/evaluation is necessarily superior to the others, but each method has merit depending upon the specific learning context i.e., the purpose, allocated time and availability of resources.

Numerous research studies on textbook analysis and evaluation have been published by utilizing a range of evaluation techniques (Widodo 2007; Ghorbani 2011; Zolfagharian and Khalilpour 2015; Seniwegasari et al. 2018). Prior research includes pre-use evaluation via checklists (Ghorbani 2011; Zolfagharian and Khalilpour 2015; Seniwegasari et al. 2018); in-depth analysis (Widodo 2007); and a combination of impressionistic and in-depth analysis (Fatima, Kazim Shah and Sultan 2015; Solikhah 2020), or the integration of all available methods (Lee 2003), while others have conducted in-use evaluation (Atiqah et al. 2014). There are also research studies on post-use evaluations that employed questionnaire to determine teachers' perceptions of the textbook (Litz 2005; Karsudianto 2019); or checklists and interviews to determine teachers' and students' perceptions of the textbook (Sahragard and Rahimi 2018; Solikhah 2020). Nearly all of those research studies undertaken have focused on general English language teaching textbooks used as references in primary school, secondary school, senior high school, and college academic writing course. Very little research of this sort has been undertaken on the subject of aviation English textbooks (Zolfagharian and Khalilpour 2015).

Cunningsworth (1995) and McGrath (2002, 2016) have identified three similar pre-use evaluation methods: impressionistic, checklists, and in-depth analysis. Impressionistic evaluations involve looking at the front and back cover, the table of contents, and skimming through the textbook to see the organization of the content. Although this gives a general impression of the textbook, it is inadequate as the sole basis for textbook selection, as it does not provide sufficient detail to ensure the fitness of the textbook with the course requirements. The checklist method requires the use of expert-generated checklists or self-generated criteria to determine the textbook's suitability and appropriateness for the learning context (Mukundan et al. 2011). Littlejohn (2011) argues that this method is problematic as the scope of pre-established checklists could be limiting and may not provide sufficient detail or may preclude necessary content and information for textbook analysts (whether teachers or researchers). These checklists generally include implicit assumptions about what 'good' materials should look like, rendering it subjective. Littlejohn (2011) advocates that textbook analysis should be objective. The third method, in-depth analysis, delves further into the textbook by investigating what content is presented. It involves systematically breaking the textbook down into its tasks to discover the principles underlying the textbook development and deduce the role of the textbook, the teacher, and the student (Littlejohn 2011). Following this, textbook analysts draw their own conclusions regarding the desirability of the textbook.

This article reports on research involving the in-depth analyses of three popularly used English aviation textbooks. After noting the shortcomings of impressionistic and checklist-based evaluations (as previously described), we employed pre-use evaluation techniques and subjected each text to in-depth analysis based on the analytical framework offered by Littlejohn (2011).

2.2. Pedagogical Principles Underpinning Textbook Development

Ideally, authors of English language learning textbooks develop their materials “in principled ways related to what they know about how languages can be effectively learned” (Tomlinson 2011). From this viewpoint, when analyzing or evaluating English language learning textbooks, it is important to identify the underlying pedagogical principles to determine whether the materials are effective in facilitating students’ language learning. Researchers in English language teaching and learning have offered an abundance of language learning theories (Long 1980; Krashen 1981; Prabhu 1987; Nunan 2004; Ellis 2005; Richards 2006; Saville-Troike 2012; Fleming 2018). Although Ellis (2005) highlights that there is no consensus regarding the ideal language learning principles, a set of generalized principles to guide language teachers in the classroom and with textbook analysis has been compiled (Ellis 2005). Ellis (2005) uses the term “instruction” to refer to instructed language learning delivered by teachers in the classroom. A focus upon these ten pedagogical principles was considered as part of the analytical process for this study, but with the replacement of the word ‘instruction’ with the word ‘materials’. The following are the ten pedagogical principles in language learning materials as adopted from Ellis (2005):

- Principle 1: Materials need to ensure that students develop both fluency and accuracy.
- Principle 2: Materials need to ensure that students focus primarily on meaning.
- Principle 3: Materials need to ensure that students also focus on form.
- Principle 4: Materials need to primarily develop implicit knowledge of L2 but not neglecting explicit knowledge.
- Principle 5: Materials need to take into account the students’ ‘built-in-syllabus’.
- Principle 6: Successful language learning requires extensive L2 input.
- Principle 7: Successful language learning involve opportunities for output production.
- Principle 8: Interaction in the target language is essential to develop L2 competency.
- Principle 9: Individual differences must be considered while designing materials.
- Principle 10: It is essential to examine free and controlled productions.

2.3. The Current Study

This study aimed to conduct analyses of three popularly used Aviation English textbooks to draw conclusions regarding its fitness for use with EFL learners studying Aviation, and to identify the underlying pedagogical principles present with the textbooks. The research questions guiding the study were:

- RQ1: How can Aviation English teachers select appropriate textbooks for use in Aviation English courses?
- RQ2: How do the selected three textbooks compare when analysed using Littlejohn’s (2011) framework for textbook analysis?
- RQ3: What are the pedagogical principles that underpin each of the aviation English textbooks?

3. METHOD

3.1. Methodology

This research stemmed from a critical theory paradigm, underpinned by an ontological assumption of critical realism, with attention to aspects of both qualitative and quantitative

approaches (Maxwell and Mittapalli 2010). It assumes that there is one reality, but it cannot be fully understood because of "basically flawed human intellectual mechanisms and the fundamentally intractable nature of phenomena" (Moon and Blackman 2014, 4). Therefore, the epistemology underpinning this study is subjectivism (Dieronitou 2014). The study's content analysis of the selected textbooks involved analysis of the texts including consideration of the books' various formats, articles, visual images, videos, etc. (Bell et al. 2019), as well as some word frequencies and percentage calculations. White and Marsh (2006) define content analysis as "a systematic, rigorous approach to analysing documents obtained or generated in the course of research". In this research, the textbooks were the documents subjected to content analysis.

3.2. Text Selection

The three aviation English textbooks that were analysed in this research study were:

Ellis, S. and Gerighty, T. 2008. *English for Aviation for Pilots and Air Traffic Controllers*. Oxford: Oxford University Press.

Emery, H. and Roberts, A. (2008). *Aviation English for ICAO Compliance*. Oxford: Macmillan.

Shawcross, P. (2011). *Flightpath Aviation English for Pilots and ATCOs Student's Book*. Cambridge: Cambridge University Press.

Throughout this paper they are referred to as Textbook 1, 2 and 3, respectively. These textbooks were purposefully selected as they are available on the global market and their use is widespread as main references in Aviation training schools. Additionally, they are published by reputable publishers renowned for publishing quality textbooks.

3.3. Data Collection

According to Littlejohn (2011), a sample of 10 – 15% of a text is acceptable for the purpose of conducting a research analysis of a textbook and he recommends that sample units be selected for analysis from the middle section of the textbook; consequently, this research complied with these guidelines. Table 1 presents the sample units selected for analysis in this research study.

Table 1. Sample units selected for analysis

Textbook	Number of units	Samples	Number of tasks
Textbook 1	12	2 units (Unit 6 & 7)	Unit 6 = 38 tasks Unit 7 = 36 tasks
Textbook 2	8	2 units (Unit 4 & 5)	Unit 4 = 25 tasks Unit 5 = 29 tasks
Textbook 3	10	1 unit (Unit 5)	Unit 5 = 70 tasks

Littlejohn's (2011) framework identifies 3 levels of analysis for the analysis of language teaching materials (see Task Analysis Sheet (Littlejohn 2011) and this was the process that we adopted for this study.

Task Analysis Sheet (Littlejohn 2011)

<p>1. 'WHAT IS THERE' <i>'objective description'</i></p> <ul style="list-style-type: none"> • statements of description • physical aspects of the materials • main steps in the instructional sections
<p>2. 'WHAT IS REQUIRED OF USERS' <i>'subjective analysis'</i></p> <ul style="list-style-type: none"> • subdivision into constituent tasks • an analysis of tasks: what is the learner expected to do? Who with? With what content?
<p>3. 'WHAT IS IMPLIED' <i>'subjective inference'</i></p> <ul style="list-style-type: none"> • deducing aims, principles of selection and sequence • deducing teacher and learner roles • deducing demands on learner's process competence

3.5. Data analysis

The tasks presented in each of the Sample Units were analyzed by utilizing a Task Analysis Sheet (Littlejohn 2011). A Task Analysis Spreadsheet (TAS) was developed using Microsoft Excel to gather the data. In this table, features presented in the tasks were scored, and the percentages calculated. Each feature stated in the TAS was assessed and determined against Littlejohn's (2011) descriptions. A score of 1 was given for any feature that matched the task. For instance, if the task expects students to 'initiate' the response, such as in a discussion task, a score 1 was given in 'initiate' column, and leave 'scripted response' and 'not required' blank. After the scoring finished, the percentages of each feature of the tasks were calculated by summing up the total number of features divided by the total number of tasks multiplied by 100%.

4. RESULTS

4.1. Section 1: What is the learner expected to do?

The selected tasks from each textbook were analyzed in relation to three aspects: turn-taking, focus, and mental operations. Turn-taking refers to the roles required of students while learning with the use of the textbook (Littlejohn 2011, 190). The term "focus" refers to whether students are required to pay attention to the meaning of the language, its form, or both (Littlejohn 2011, 190), while mental operations refer to the kinds of mental processes required of the students undertaking the tasks (Littlejohn 2011, 190).

4.1.1. Turn-taking

The analyses revealed that the most prevalent student role in the three aviation English textbooks was to produce scripted responses with proportions of 71.5%, 69.5%, and 50.7% for Textbooks 1, 2, and 3, respectively (see Table 2). This means that students need to provide responses to the questions presented in the textbook using the aviation language presented in the reading or listening texts. For instance, these tasks could involve answering comprehension questions, deciding upon true or false statements, underlining the correct information based on the texts, completing sentences with words provided, matching halves sentences, and so on. These types of tasks are known as controlled practices.

Table 2. The percentage of turn-taking

	Textbook 1	Textbook 2	Textbook 3
a. Initiate	27%	27%	46.5%
b. Scripted Response	71.5%	69.5%	50.7%
c. Not Required	1.5%	3.5%	2.8%

'Initiate' was the second most common role expected of the students, with 27% for Textbooks 1 and 2 and 46.5% for Textbook 3. It means that the students are free to voice their opinions or provide information using their own language, whether orally or in writing. For example, answering questions that require them to apply their knowledge, or discuss a specific topic with their peers. These tasks represent free practices.

The tasks that did not require students to play an interactive role had the lowest percentages, with only 1.5% in Textbook 1, 3.5% in Textbook 2, and 2.8% in Textbook 3. This implies that students are encouraged to engage in communicative activities, rather than a passive listener.

Drawing on Ellis's (2005) principle 10; it is essential that materials provide a variety of practices from controlled to free practices. The three textbooks were evidenced to be following this principle. In terms of the aim of achieving fluency, students need to be encouraged to practice their fluency by giving them more opportunities to express themselves in English. Therefore, more tasks that trigger the students to 'initiate' are better than those that require the students to produce 'scripted response' or 'not required' to produce any response at all. As revealed, Textbook 3 provided more opportunities for students to 'initiate' using the language. In this regard, Textbook 3 was more favourable than the other two textbooks. Meanwhile, Textbooks 1 and 2 shared the same percentage of 'initiate' activities, but Textbook 1 received a larger percentage of 'scripted response' activities than Textbook 2. The number of tasks that do not require students to respond at all was also higher in Textbook 2, which is undesirable because students need to engage in active participation to stimulate language development. In this regard, this research identified that Textbook 1 is viewed as more favourable than Textbook 2.

4.1.2. Focus

This part of the analysis aimed to identify what it is that the learners are expected to focus upon while utilizing the textbook materials, namely whether they should put their attention on the language system, the meaning, or both form and meaning. Table 3 displays the proportion of tasks that have been analyzed based on their focus.

Table 3. The percentage of focus

	Textbook 1	Textbook 2	Textbook 3
a. Language system (form)	28.5%	17%	5.6%
b. Meaning	68.5%	83%	90.1%
c. Form & Meaning	3%	0%	4.2%

Table 3 shows that the majority of tasks in each of the three textbooks required students to focus on meaning, with 68.5% of tasks in Textbook 1, 83.5% of tasks in Textbook 2, and 90.1% of tasks in Textbook 3. It reflected Ellis's (2005) Principle 2, which states meaning should be the primary learning focus for effective language acquisition.

Additionally, a small proportion of the textbooks provided tasks that focused on language system (form): 28.5% of tasks in Textbook 1, 17.5% of tasks in Textbook 2, and 5.6% of tasks in Textbook 3. It suggested that the three textbooks also paid attention to language form, which reflected Principle 3. This helps ensure that students develop both their fluency and accuracy of aviation language. However, only 5.6% of the tasks in Textbook 3 focused on language form, indicating that there could be a risk of inaccuracy of language production if insufficient attention is paid to form. Textbook 2 had smaller percentages in the focus on form compared to Textbook 1. If students are to attain minimum ICAO level 4 in structure, we suggest that an increased amount of focus-on-form should be embedded in the textbook. Therefore, in this regard, Textbook 1 appeared to be the most favourable, Textbook 2 was the second most favourable, and Textbook 3 was least favourable.

4.1.3. Mental Operations

This part of the analysis reports an examination of the mental processes involved to complete the tasks set in the textbooks. Not surprisingly, the textbooks featured an array of tasks requiring students to draw upon an assortment of mental processes in order to aid their comprehension of inputs and to produce outputs. Table 4 represents the various mental processes required to complete tasks from each of the three textbooks.

The mental processes presented in Table 4 are categorized into lower-level and higher-level mental operations (Bloom 1956; Anderson *et al.* 2001), all three textbooks had higher percentages of lower-order mental operations, accounting for 74% in Textbook 1, 64.5% in Textbook 2, and 60.5% in Textbook 3. Conversely, there were lower percentages of tasks requiring higher-order mental operations, accounting for 25.5% in Textbook 1, 35.5% in Textbook 2, and 39.4% in Textbook 3.

The findings suggested that all three textbooks laid less emphasis upon nurturing higher-level mental operations, than low-order operations, despite the fact that pilots and ATCOs require high-level mental operations and decision-making skills to perform their jobs effectively. Despite this commonality, in this study, Textbook 3 had the highest percentage of higher order mental operations, and consequently is favourable in this respect, followed by Textbook 2, and then Textbook 1.

Table 4. The percentage of mental operations

	Textbook 1	Textbook 2	Textbook 3
Lower Order Mental Operations			
Repeat Identically	5.5%	0%	4.2%
Repeat with expansion	0%	2%	2.8%
Repeat selectively	0%	0%	1.4%
Retrieve from STM (working memory)	7%	2%	7%
Formulate items into larger unit	8%	0%	11.3%
Decode semantic/proportional meaning	8.5%	8%	0%
Select information	32%	41%	31%
Categorize selected information	6.5%	6%	1.4%
Attend to example/explanation	0%	1.5%	1.4%
Apply stated language rule	6.5%	4%	0%
Total	74%	64.5%	60.5%
Higher Order Mental Operations			
Hypothesize	0%	0%	2.8%
Analyze language form	4%	3.5%	2.8%
Apply general knowledge	1.5%	12%	7%
Negotiate	2.5%	3.5%	0%
Express own ideas/information	17.5%	16.5%	26.8%
Total	25.5%	35.5%	39.4%

Another significant finding is that the tasks did not correspond to any of Ellis's (2005) enumerated principles. The addition of another principle regarding mental operations would be a valuable implication.

4.2. Section 2: Who with?

The second section of the Task analysis addressed the type of participation expected of students in the classroom; that is, *With whom are students expected to collaborate?* Table 5 presents the percentages of participation found in the three textbooks.

Table 5. The percentage of participation

	Textbook 1	Textbook 2	Textbook 3
Individually			
Learner individually simultaneously	65.5%	71%	26.8%
In pairs/groups/class			
Learner(s) to the whole class	0%	1.5%	22.5%
Learners with whole class simultaneously	7%	11%	11.3%
Learners in pairs/groups, whole class observing	1.5%	0%	7%
Learners in pairs/groups, simultaneously	26%	16.5%	32.4%
Total	34.5%	29%	73.2%

It can be seen from Table 5 that Textbooks 1 and 2 had similar expectations for student participation in completing the tasks, whereas Textbook 3 was significantly different. Textbooks 1 and 2 placed greater emphasis on individual learning, as demonstrated by the fact

that 65.5% of tasks in Textbook 1 and 71% of tasks in Textbook 2 required students to work individually, while the remaining tasks entailed collaboration with peers. Meanwhile, 73.2% of tasks in Textbook 3 required students to collaborate with other peers in completing the tasks, and the rest to be completed independently.

This finding relates to Ellis's (2005) principle 8 regarding the significance of interaction in the development of L2 proficiency. The finding suggests that Textbooks 1 and 2 would benefit from the inclusion of more tasks that involve student interaction. Notably, interaction is one of the six skills specified by the ICAO language proficiency requirements; hence, a textbook that enhances interactive skills is viewed as more favourable. Based on the fact that Textbook 3 placed the greatest emphasis on student interaction, it may be argued that Textbook 3 is the most favourable in this respect, followed by in turns Textbook 1, and Textbook 2.

4.3. Section 3: With what content?

This last section of the task analysis identified the type of input provided to students and the expected output from them. The input and output are broken down according to their form, source, and nature.

4.3.1 Types of Input for Learners

Input provided to students may be presented in the form of graphic, written words/phrases/sentences, spoken words/phrases/sentences, and extended written or aural discourses (Littlejohn 2011, 190). Table 6 presents the findings from the analysis of the forms of input presented in the three textbooks.

Table 6. The percentage of input form

	Textbook 1	Textbook 2	Textbook 3
Graphic	4%	13%	8.4%
Written Input			
Words/phrases/sentences: written	55.5%	40.5%	43.7%
Extended discourse: written	9.5%	13%	0%
Total	65%	53.5%	43.7%
Aural Input			
Words/phrases/sentences: aural	13.5%	17%	22.5%
Extended discourse: aural	17.5%	16.5%	25.4%
Total	31%	33.5%	47.9%

As presented in Table 6, it is clear that the majority of input in all 3 textbooks is written, involving words, phrases and sentences. The levels of Aural input were similar in Textbooks 1 and 2 (approx. 30%), but more prevalent in Textbook 3 (approx. 48%). Graphic input was given the lowest percentage in all three textbooks, with 4% in Textbook 1, 13% in Textbook 2, and 8.5% in Textbook 3. According to Table 6, Textbook 1 provided 65% written input, 31% aural input, and 4% graphic input; Textbook 2 provided 53.5% written input, 33.5% aural input, and 13% graphic input; and Textbook 3 provided 43.7% written input, 47.9% aural input, and 8.4% graphic input. It is evidenced from this finding that all the three

textbooks provided extensive L2 input, which relates to Ellis's (2005) principle 6 regarding the significance of extensive L2 input for successful language learning.

The finding also implied that Textbooks 1 and 2 emphasized written input more than Textbook 3, which emphasized aural input. It is important to note that communication between pilots and ATCOs is aural, requiring speaking and listening skills but little reading and writing skills (ICAO 2010). It is essential that students receive as much aural input as possible to familiarize themselves with listening, an essential skill for their jobs. With regard to consideration of input types, Textbook 3 was the most favourable among these textbooks, followed by Textbook 2, and then Textbook 1.

4.3.2. *Expected Output from the Learners*

Similar to input, the expected output from students can range from graphic, written/aural words/phrases/sentences, to extended written/aural discourses. Table 7 (below) presents the types of expected output form from students for all the three textbooks.

Table 7. The percentage of output form

	Textbook 1	Textbook 2	Textbook 3
Graphic	0%	2%	0%
Written Output			
Words/phrases/sentences: written	60%	54%	33.8%
Extended discourse: written	0%	0%	2.8%
Total	60%	54%	36.6%
Aural Output			
Words/phrases/sentences: aural	27%	33%	56.4%
Extended discourse: aural	13%	11%	7%
Total	40%	44%	63.4%

As shown in Table 7, there is a significant difference in the expected output of students using Textbooks 1 and 2 vs Textbook 3. While Textbooks 1 and 2 projected higher written output (60% and 54%, respectively), Textbook 3 expected more aural output (63.4%). Graphic output was only produced from Textbook 2 in 2% of the tasks.

The importance of output production relates to Ellis's (2005) principle 7, which emphasizes output production opportunities for successful language learning. Despite the fact that the three textbooks provided opportunities for output production, it is desirable to have more aural output than written output. As previously mentioned, pilots and ATCOs communicate primarily in spoken language. Consequently, students should have more opportunities for output production to enhance their fluency. In this regard, Textbook 3 was found to be the most favourable, Textbook 2 was second, and Textbook 1, last.

4.3.3. *Sources of Input and Output*

Input and output in class activities may come from the textbook, the teacher, the learner(s), or from outside the course/lesson (Littlejohn 2011). Tables 8 and 9 below present the input and output sources for all three textbooks. Table 8 demonstrates that textbook is the primary source of input, accounting for 94.5%, 100%, and 88.7% in Textbooks 1, 2, and 3, respectively. Meanwhile, the secondary source of input in Textbooks 1 and 3 is the student(s), which

accounts for 4% and 11.3% respectively. There is a small percentage of tasks that use outside class sources as input, amounting to 1.5% in Textbook 1; while Textbooks 2 and 3 do not require input to be sourced from outside the lesson.

Table 8. The percentage of input source

	Textbook 1	Textbook 2	Textbook 3
Materials	94.5%	100%	88.7%
Teacher	0%	0%	0%
Learner(s)	4%	0%	11.3%
Outside the course/lesson	1.5%	0%	0%

When it comes to producing output, students may discover the source mostly from the textbooks, as much as 74.5%, 79%, and 67.6% in Textbooks 1, 2, and 3, respectively (refer to Table 9). Furthermore, they draw on their own experience, knowledge, and opinion, which accounts for up to 25.5% of tasks in Textbook 1, 21% of tasks in Textbook 2, and 31% of tasks in Textbook 3. Additionally, Textbook 3 requires students to find source outside the lesson in 1.4% of the tasks.

Table 9. The percentage of output source

	Textbook 1	Textbook 2	Textbook 3
Materials	74.5%	79%	67.6%
Teacher	0%	0%	0%
Learner(s)	25.5%	21%	31%
Outside the course/lesson	0%	0%	1.4%

This finding is useful to draw conclusions on the roles of textbook, teacher, and student when using the textbook. As can be seen from Tables 8 and 9, materials/textbook was regarded as the primary source of input and output. Surprisingly, the teacher was found to have 0% proportion as input/output source. This does not mean, however, a teacher does not have any participating role at all in the classroom. Due to the fact that the analysis was limited to a *pre-use* evaluation of the textbook, there was no opportunity to observe implementation of the texts' activities in the classroom, nor to observe teacher input beyond the textbook. This pre-use evaluation revealed that the teacher is expected to be facilitator in the teaching/learning process in the classroom. Additionally, learners were represented as the second-highest proportion of input/output source. In English for Specific Purposes (ESP), it is possible that students have more background knowledge of the field than the teacher, ideally the teacher should encourage students to share their own experience and knowledge as a source for learning collaboratively in the classroom.

The findings also indicated that only a small percentage of input/output was to be sourced from outside the course/lesson which is contrary to Ellis's (2005) Principle 6, which suggests teachers/materials should establish opportunities for students to obtain input outside of the classroom. All three textbooks could benefit from the inclusion of more tasks requiring students to obtain input from outside the classroom to find more opportunities to develop themselves; this is because a successful language learner seeks opportunities to develop themselves outside of class time and does not rely solely on the lesson they receive in class. Teachers/materials developers should ensure that students have this opportunity.

All three textbooks were comparable in this regard, so none was found more favourable than the others.

4.3.4. *The Nature of Input and Output*

The last aspect of the tasks analyzed relates to the nature of input and output – whether it is grammatical rule, linguistic item, non-fiction text, fiction text, or personal information/opinion (Littlejohn 2011). Tables 10 and 11 present the nature of input and output in all the three textbooks.

Table 10. The percentage of input nature

	Textbook 1	Textbook 2	Textbook 3
Grammatical rules	28.5%	25%	9.9%
Linguistic items	39.5%	41.5%	31%
Non-fiction	8%	9.5%	26.8%
Fiction	2.5%	13%	0%
Personal information/opinion	21.5%	11%	32.4%

Table 11. The percentage of output nature

	Textbook 1	Textbook 2	Textbook 3
Grammatical rules	29%	25%	9.9%
Linguistic items	38%	42%	31%
Non-fiction	8%	5.5%	25.4%
Fiction	2.5%	9%	0%
Personal information/opinion	22.5%	18.5%	33.8%

As shown in the tables, Textbooks 1 and 2 shared similar percentages of input and output nature, while Textbook 3 was different. In Textbooks 1 and 2, linguistic items were the most frequent type of input and output, accounting for 38% - 39.5% and 41.5% - 42% of the tasks in Textbooks 1 and 2, respectively. In contrast, personal information/opinion was the most common type of input and output in Textbook 3 was, accounting for 32.4% - 33.8% of the tasks. Grammatical rules were the second most prevalent type of input and output in Textbooks 1 and 2, accounting for 28.5% - 29% and 25%, respectively, whereas linguistic items placed second in Textbook 3 with 31%. Personal information/opinion, which accounted for 21.5% - 22.5% and 11% - 18.5% of tasks in Textbooks 1 and 2 was ranked third, whereas in Textbook 3, non-fiction texts were the third most prevalent nature of input and output, accounting for 25.4% - 26.8%.

This finding suggested that Textbook 3 valued personal information/opinion of the students to be included in classroom activities more than the other textbooks. Creating opportunities for utilizing more personal information/opinion relates to Ellis's (2005) principles 2 (primary focus on meaning), principle 4 (primarily develop implicit knowledge), principle 7 (opportunities for output production), principle 8 (interaction develops L2 proficiency), principle 9 (valuing individual differences), and principle 10 (examining controlled and free productions).

Even though different in proportions, the three textbooks focused more on providing knowledge related to linguistic items, such as vocabulary and language functions rather than grammatical rules. This is related to Ellis's (2005) principle 2 (primary focus on meaning).

It is also worth noting that Textbook 3 used non-fiction texts the most compared to the other textbooks by using real conversation recorded from pilots and ATCOs communication. It is related to aspect of authenticity, which is missed from Ellis's (2005) principles list.

In Textbooks 1 and 2, grammatical rules received much attention, which related to Ellis's (2005) principle 3 (focus on form), while Textbook 3 paid little attention to focus on form. In this regard, Textbook 3 should include more tasks which focus on form, to help students improve their accuracy in using the language.

In this aspect of task analysis, Textbook 3's strengths outweigh its weaknesses; thus, it is argued to be the most favourable, followed by Textbook 1, and then textbook 2.

4.4. Summary

In summary, the final results of the comparison of the three aviation textbooks is presented in Table 12 to determine which aviation English textbook emerged more favourable than the others based on the result of tasks analysis and inferences drawn from Ellis's (2005) principles of instructed language learning.

Table 12 The Comparison Result of Three Textbook Analyses

		Textbook 1	Textbook 2	Textbook 3
1	Turn-taking	□□	□	□□□
2	Focus	□□□	□□	□
3	Mental operations	□	□□	□□□
4	Interaction	□□	□	□□□
5	Input	□	□□	□□□
6	Output	□	□□	□□□
7	Sources of Input/Output	□	□	□
8	Nature of Input/Output	□		□□
	Total	12 points	11 points	19 points

In terms of turn-taking, Textbook 3 was evidenced to provide more opportunities for students to 'initiate' than Textbooks 1 and 2, which required students to produce more 'scripted responses'. Several tasks in Textbook 3 required students to communicate their ideas or opinions by applying their general and language knowledge without relying on the textbook to find the answers within the material presented. For example, engaging in lead-in questions, discussing a certain topic, or expressing their ideas. It is believed that providing students with more practices to use the target language (L2) will facilitate their L2 acquisition. In this respect, Textbook 3 was awarded three points. On the other hand, Textbooks 1 and 2 shared the same percentage of 'initiate', but Textbook 1 received a larger percentage of 'scripted response' than Textbook 2. The number of tasks that did not require students to respond at all was also higher in Textbook 2, which was not desirable because students need to engage in active participation to stimulate language development. In this regard, Textbook 1 was better than Textbook 2; therefore, Textbook 1 received two points, whereas Textbook 2 received one point.

In terms of focus, all three textbooks focused primarily on meaning, which was desirable for developing students' communicative skills. However, attention on form should not be overlooked, since it would help improve accuracy of the language. The least percentage of focus on form was found in Textbook 3, implying that students would risk being inaccurate in their language production. Meanwhile, Textbook 2 had less percentage of focus on form than Textbook 1. Due to the fact that language structure is assessed in the ICAO English language proficiency test, it was preferable to have materials that focus primarily on meaning but not neglecting focus on form. In this sense, Textbook 1 was more favourable than the other two textbooks, obtaining three points, whereas Textbook 2 received two points, and Textbook 3 one point.

Textbook 3 contained the highest proportion of tasks requiring higher order mental operations compared to the other two textbooks. Pilots and ATCOs require critical thinking skills to perform their jobs effectively. For instance, decisions made by pilots prior to takeoff or landing, or by ATCOs' while applying vertical and horizontal separation to prevent aircraft collision. Therefore, Textbook 3 earned three points, while Textbook 2 earned two points for having more tasks requiring higher mental operation than Textbook 1, which earned one point.

It was discovered that Textbook 3 provided more peer collaboration than Textbooks 1 and 2, which was believed to facilitate language learning. In this sense, three points were granted to Textbook 3. Meanwhile, Textbook 1 contained more collaborative tasks than Textbook 2. Textbook 1 received two points in this category, whereas Textbook 2 obtained only one.

It was favourable that aviation English textbook provided more aural input in order to familiarize students with the nature of aeronautical radiotelephony communication between pilots and ATCOs. In this regard, Textbook 3 earned three points for providing more aural input than the other two. Meanwhile, Textbook 2 provided more aural input than Textbook 1, earning Textbook 2 two points, and Textbook 1 one point.

Aural fluency should be emphasized in terms of output production, as it is one of the skills examined on the ICAO language proficiency test. Textbooks that provide more opportunities for aural output are therefore preferred. In this regard, Textbook 3 scored three points, Textbook 2 two, and Textbook 1 one.

In terms of sources for input/output, the three textbooks shared comparable values. All textbooks relied on the materials as the input/output source and students' own experience, however they have not optimized input/output obtained from outside the course/lesson, which, according to Ellis's (2005) principle, is useful for facilitating language development outside of classroom time. Given that all three textbooks had the same ideals in this regard, none is deemed more favourable than the others, earning each textbook one point.

Finally, regarding the nature of input/output, it was discovered that Textbook 3 valued the personal information/opinion of the students, utilized more non-fiction texts than the other two textbooks, and placed less emphasis on form than the others, earning it two plus points and one minus point. Meanwhile, Textbook 1 was found to contain more tasks that valued personal information than Textbook 2 (one plus point for Textbook 1), but less non-fiction texts than Textbook 2 (one minus point for Textbook 1). In terms of grammatical input, Textbook 1 gave more attention to it than Textbook 2, earning one plus point for Textbook 1. In total, Textbook 3 earned two points, Textbook 1 scored one point, and Textbook 2 received no points.

As seen in Table 13, Textbook 1 received 12 points, Textbook 2 received 11 points, and Textbook 3 received 19 points, indicating that Textbook 3 was the most favourable, Textbook 1 was the second most favourable, and Textbook 2 was the least favourable.

In addition, it was discovered that all the three textbooks adhered to Ellis's (2005) principles of instructed language learning. Also, Textbook 3 reflected two additional principles not listed in Ellis's (2005) principles. Those were related to developing higher order mental operations that facilitate the development of students' critical thinking, and the authenticity of input that is useful for the specific purpose of using the language in the target situation (future jobs as pilots and ATCOs).

5. CONCLUSION

The analyses of the three aviation English textbooks namely *Aviation English: for ICAO Compliance*, *English for Aviation: for Pilots and Air Traffic Controllers*, and *Flightpath: Aviation English for Pilots and ATCOs* was motivated by the fact that these textbooks are widely used as references in aviation training schools in Indonesia, despite there being no in-depth analysis of their quality. Utilising Littlejohn's (2011) framework for textbook analysis and Ellis's (2005) ten principles of instructed language learning enabled us to deduce the underlying pedagogical principles of the three textbooks. Based on the study's findings, it is concluded that the three textbooks share similar pedagogical principles, but with differences in proportions. Ellis's (2005) ten pedagogical principles (see p. 5-6) were found to underpin the three aviation English textbooks

A key discovery illuminated by our research was that, additionally, Textbook 3 was founded on two other pedagogical principles that were not listed in Ellis (2005) as follows:

1. The materials promote higher order of mental operations
2. The materials use authentic input

The evaluation of the three textbooks using Littlejohn's (2011) framework in conjunction with Ellis' (2005) pedagogical principles revealed that Textbook 3 was most favourable, Textbook 1 came second and Textbook 2 was the least favourable. Additionally, positive characteristics of Textbook 3 included that its' tasks promoted more language initiation, encouraged higher-order mental operations, it was intended to stimulate more interaction, was designed to provoke more authentic input, and provided more opportunities for output production than Textbooks 1 and 2. Moreover, it is suitable for use both for student and professional pilots/ATCOs, in an initial training as well as recurrent training.

Suggestions for further research of this type include that researchers analyze larger samples, or all units, of a textbook to generate more detailed results and that consideration to undertaking a team of approach to enhance validity; and researching with a group of aviation English teachers to rate the textbooks using a Task Analysis Sheet. Other possibilities include conducting in-use and post-use analyses. Given the increasing reliance upon aviation as the most popular mode of transport in a global transnational world, it is imperative that more research needs to be conducted in this industry.

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Original scientific paper

TEACHING ESL SCIENCE COMMUNICATION IN MULTIDISCIPLINARY MULTILEVEL CLASSROOM SETTINGS

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Abstract. *The transformation of modern science from monodisciplinary to multidisciplinary leads to cardinal changes in the methods of teaching English L2 science communication, which is a challenge for non-anglophone researchers who need to share research outcomes in English within and beyond their research-specific community. The paper describes a case study in which the main objective is to understand how immersion of English L2 speaking researchers into a multidisciplinary multilevel classroom setting affect the development of science communication skills needed to reach broader audiences through innovative dissemination channels, making research findings clearly intelligible to both specialists and non-specialists alike. The paper defines the potential of educational reconstruction of multidisciplinary science communication context that involves interaction of researchers with varying English proficiency levels, professional expertise, and research area. Our data demonstrate that metacognitive teaching strategies can assist early-stage researchers to develop their ability to integrate fully into the larger global science community and reap the benefits of science communication.*

Key words: *science communication, early-stage researchers, multidisciplinary multilevel classrooms*

1. INTRODUCTION

Today, the way science is done is fundamentally different from what it was in the previous centuries. It is no longer monodisciplinary as research studies increasingly draw on knowledge and expertise outside of one main discipline. The understanding of the present world can no longer be accomplished in the framework of monodisciplinary research. Modern science is embedded in economic activities, cultural orientations, and political environments that shape and legitimate scientific development as external drivers. Besides, to the role of an individual researcher has been added the power of organized research teams, which bring together individuals from multiple disciplines. Research networks, alliances, or international research consortia have evolved to strengthen ties within the international scholarly community.

Present studies state the importance of establishing connections between science and society, and researchers and science communicators look for ways to help people not only

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comprehend science but also care about science-related issues using different techniques and tools, e.g., storytelling (Sheremet and Deviatko 2022), applying reflective practice within networks in order to deepen understanding of the lay audience's interests (Roedema et al. 2022), or focusing on culture and meaning, which opens up new ways of analyzing empirical material.

Furthermore, present-day digitally networked technologies are rapidly changing the way the results of academic research are communicated within communities and with the wider public (Baum and Coen 2019). Scientific information is now being collected, treated, and disseminated on a massive scale. Science communication is no longer a one-way presentation of facts but a two-way dialogue that depends on interpersonal skills (Appleby and Hiller 2012, Barrie 2012) of interlocutors who are forced to be able to work in their specific discipline while making connections with other disciplines in order to disseminate scientific findings, provide feedback on a concrete research project, interpret and repackage scientific information (Ford and Teare 2006) for a target audience with various levels of comprehension of the discipline (Appleby and Hillier 2012, Maxwell and Angehrn 2010) and for the non-research audiences.

Many now view an increasingly greater number of scholarly journals that request that authors write in a way that appeals to and engages a broader audience. Further, we list some excerpts of international peer-reviewed journals' aims and scope in support of this fact. For example:

"Physics Reports keeps the active physicist up-to-date on developments in a wide range of topics by publishing timely reviews [...]. These reviews are specialist in nature but contain enough introductory material to make the main points intelligible to a non-specialist. The reader will not only be able to distinguish important developments and trends in physics but will also find a sufficient number of references to the original literature" (SJR - Journal Search, n.d.-a).

"Current Opinion in Cell Biology serves as an invaluable source of information for researchers, lecturers, teachers, professionals, policy makers and students [...]" (SJR - Journal Search, n.d.-b).

"[Computer Physics Communication requires that] (t)he introduction to each paper should be directed to a general audience and the author(s) must clearly articulate the novelty and significance of the paper and how it will advance the solution of an important physics application. Papers which, in the opinion of a Principal Editor, fail to do this will not be sent for review [...]" (Guide for Authors - Computer Physics Communications - ISSN 0010-4655, n.d.).

Communicating science, multidisciplinary science in particular, with the broad range of audiences that make up 'the outside world' is a challenge of its own. It is very different from what scientific communication used to be several decades ago when scientists had to present their research findings to a select group of researchers and experts specializing in a specific subject area through print-based peer-reviewed publications or in-person science events. Indeed, science communication was used to communicate new scientific knowledge mostly through academic journal articles, technical reports, and presentations at conferences and grant applications to an audience of researchers, scientists, and technical experts. By contrast, present-day science communication deals with communicating research for a broad range of audiences that forms the general public, informing, educating, and raising awareness of science-related topics through innovative dissemination channels and formats. Table 1 highlights and compares "previous" and "current" trends in science

communication that we considered when designing a course on science communication for STEAM professionals.

Table 1 Comparison of the Key Features of ‘Previous’ and Current Science Communication Trends

Features	Science Communication Trends	
	Previous	Current
Scope of scientific area	Monodisciplinary	Multidisciplinary
Scope and nature of audiences	A select group of researchers and experts specializing in specific subject areas	Professional academic social networks Non-research audiences: funding, industrial, legal organizations, religious organizations, politicians, policymakers, academic teachers, students General public (individuals outside of academic and research circles)
Model of Science	Deficit model	Dialogue model
Communication	A top-down information transmission mode (“The communicator is assumed to be authentic and honest in their presentation, while the receiver is a passive partner absorbing the information”. (Stine 2021, 9)	A bottom-up information transmission mode where multiple people shape the conversation (van der Sanden and Meijman 2008)
Dissemination	Print-based / in-person	Digital / virtual
Output	Scientific journals and the journals of the learned societies, scientific books, popular almanacs and calendars, monographs, personal letters between scientists, conferences, workshops, seminars	Open access science, preprints Teleconferences

Inspired by a variety of novel ways of communicating research findings, observations, and views to interact with different audiences, many L2 speaking researchers neglect sharpening their science communication skills or do not know how to overcome their shyness interacting with their potential audiences in English. As a result, they lack appropriate training and knowledge for effective science communication. Indeed, some research proves that “those lacking language proficiencies tend to feel frustrated, experience a sense of professional loss, and have difficulty maintaining dignity” (Hwang 2013, 9). As Charles (2007) points out, professionals could question their disciplinary expertise in relation to their perceived linguistic proficiency comparable to English L1 speakers in their profession (Huttner-Koros and Perera 2016). However, all scientists, regardless of their language, have to interact with multilingual and multicultural

researchers with a range of associated knowledge skills and attitudes and different levels of English language proficiency.

Although previous studies have explored different methods for developing science communication skills, e.g., writing skills (Li and Flowerdew 2020, Fernandez et al. 2017, Burgess and Cargill 2013), oral communication skills (San-Valero et al. 2019, Ponzio et al. 2018, Purnomo and Fauziah 2018), and reading skills (Nigro 2022, Kim et al. 2021) in a learning environment, no study to date has examined strategies for science communication training in a multidisciplinary multilevel environment, and very little is known about the effectiveness of the immersion of English L2 speaking researchers into ‘real-world’ science communication context in a classroom setting to foster their intrinsic motivation to collaborate with other learners at the intersection of diverse scientific disciplines regardless of the level of English-level language competence.

2. OBJECTIVE

The overall objective of our case study is to understand how multidisciplinary multilevel classroom setting can help early-stage researchers (ESRs) hone their science communication skills to share their research findings to diverse audiences outside the discipline. Through qualitative research methods, this study will address the following questions:

- RQ1: How does immersion into multidisciplinary science context affect the learners’ motivation to communicate their research findings to a target audience with various levels of comprehension of the discipline and non-specialists through traditional and innovative dissemination channels?
- RQ2: Do learners with different levels of language competence effectively communicate with one another?
- RQ3: What teaching strategies can accommodate different disciplines and language levels in one class and cater to learners’ needs in a less toilsome and time-consuming way?

To answer these research questions, we opted for a case study approach to problematize and add details to the theory and practice of teaching science communication in a multidisciplinary multilevel environment and to contribute to better understanding of ESRs’ vision of the most important and salient aspects of science communication.

In an effort to address the objective, we set the context for our case study by outlining the basic components of the course on science communication for STEAM professionals, i.e., purpose, content, strategy, and assessment.

3. MATERIALS AND METHODS

For two years (2020-2022), we taught an eight-month course on science communication for faculty members, researchers, and students across all academic disciplines and fields that are taught and researched at our university. The course consisted of a four-month phase (first semester) in which the main focus was made on coping with English level heterogeneity of interlocutors involved in communication about science-related themes. During this phase, we discussed language-related barriers that could hinder effective communication, e.g., inappropriate use of jargon, abstract

language, non-verbal behavior, and unnecessary complexity that could distract audience members. We used training (structured exercises emphasizing mutual listening and talking) developed with regard to the diversity of participants' English proficiency levels to stimulate interpersonal interaction based on solving a certain problem that involves the activation of four language skills allowing participants to develop language proficiency in the context of "natural" conversations.

The possibility of introducing blogging in a learning framework has proved to result in improvements the students' outcomes in terms of the European Framework of Reference for Languages by the researchers (Montalban 2022). Thus, the remaining four months of the course were devoted to the acquisition of science communication skills (both written and oral) using real-world innovative dissemination channels that go beyond traditional ones, e.g., social networking sites for scientists and researchers, science-related podcasts, pages and Facebook profiles, Academia.edu, LinkedIn, Twitter, Research ID, Mendeley Research Network, IEEE Collabratec, Research Gate, science talks on TV or radio, institutional websites, personal websites.

We assumed that students could construct their knowledge in collaboration with more capable individuals and those whose English level was high would take it upon themselves to explain grammar concepts or act as a kind of assistant for students who were less competent in English, which is always helpful on a practical level and also boosts the more advanced students' confidence in their understanding of English. We also assumed that higher-level students would monitor lower-level students, and lower-level students could monitor higher-level students, helping the latter become aware of fossilized errors they make.

Given the conceptual vision of our course, we relied on the belief that science communication skills should be taught through language-mediated cognitive activities, including peer-to-peer interaction as an opportunity for collaborative scholarly dialogue, sharing and networking as a tool for communicating research findings outside the sciences to policy makers, taxpayers, and general public, and discussing and debating as a strategy to influence the trustworthiness of researchers and the credibility of information.

Modeling real-world science communication context is impossible without identifying all limitations and regulations according to which students are supposed to act so that they feel confident to operate in typical professional scenarios. In fact, classroom learning can be only partly relevant to satisfying learners' current academic and professional communication needs since a researcher-teacher-peer relationship, which it can provide, is quasi-professional. It might not be considered satisfactory enough as there are no 'receivers' involved (e.g., experts, specializing in specific subject areas) who serve as 'gatekeepers' to research findings and, later, readers who make up the academic community.

However, in some cases, early-stage researchers become science communication leaders in their academic communities, and subsequently mentor their more senior colleagues. With this fact in mind, when developing our course, we utilized a collaborative learning approach in order to integrate both budding researchers who have little experience in science but have inquisitive mind and reveal a strong intention to embrace innovative dissemination practices in their research and "veterans" of science who may have high-profile results published in high-ranking journals but do not know how to tell compelling stories about their research.

Table 2 outlines four basic components – purpose, content, strategy, and assessment – that laid the foundation of the course on science communication for STEAM professionals.

Table 2 Teaching Model of Multidisciplinary Multi-level Course on Science Communication

Purpose		Content	
ESL Domain	<ul style="list-style-type: none"> Development of an ability to cope with English level heterogeneity of interlocutors involved in communication about science-related topics 	Quasi-professional	<ul style="list-style-type: none"> Training materials (structured exercises emphasizing mutual listening and talking) developed with regard to the diversity of participants' English proficiency levels to stimulate interpersonal interaction based on solving a certain problem that involves the activation of verbal communication skills
SciComm Domain	<ul style="list-style-type: none"> Acquisition of science communication skills (both written and oral) using innovative dissemination channels that go beyond traditional ones, e.g., academic publishing 	Real-world	<ul style="list-style-type: none"> Social media: blogs, social networking sites for scientists and researchers, science-related podcasts, science-related pages and Facebook profiles, Academia.edu, LinkedIn, Twitter, Research ID, Mendeley Research Network, Kudos, IEEE Collabratec, Research Gate, science talks on TV or radio, institutional websites, personal websites
Strategy		Assessment	
Multi-level teaching (Roberts 2007, Treko 2013)	<ul style="list-style-type: none"> Teaching to the middle then assigning leveled activities allowing participants' involvement in reaching one definite aim Teaching around science-related themes to increase participants' motivation and foster their curiosity to learn from for peers with different scientific interests Integrating the four language skills in each class allowing participants to develop their language skills in the context of 'natural' conversations Peer teaching to increase the understanding of the course content and establish an environment where peers can learn in small groups and learn how to work as a team 	Internal	<ul style="list-style-type: none"> Self-assessment of personal development and improved performance Reflection on previous valued experiences in search of significant discoveries or insights about oneself, one's behaviors, one's values, or knowledge gained

Meta-cognitive	<ul style="list-style-type: none"> ▪ Modeling real-world science communication situations where conversational language, shared stories, and relationship building can take place ▪ Integrating meta-cognitive activities, e.g., peer-peer interaction and collaboration at the intersection of diverse scientific disciplines, discussing, and debating ▪ Storytelling ▪ Encouraging participants to create new science communication resources via social networking sites, Twitter posts, Instagram stories, science-related pages and Facebook profiles, etc. ▪ Encouraging participants to initiate discussions via social media with members of the scientific community near and far ▪ Encouraging participants to ‘learn by doing’ ▪ Allowing students freedom – i.e. agency, autonomy and environments to foster self-efficacy – to develop skills that match real-world activity, provide scope for participants to discover and create what is most relevant to them (Walker 2022) 	External	<ul style="list-style-type: none"> ▪ Feedback from the peers and the target audience, i.e., the ‘receivers’ of the research outcomes (academic community)
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The course content is divided into two equally significant domains depending on the purpose, i.e., ESL Domain and SciComm Domain. Firstly, quasi-professional content (ESL Domain) in which students approach science communication process collaborating with classmates (peer-to-peer learning) and the course instructor or ‘language mediator’ whose function was limited to selecting and analyzing best examples of science communication (model texts) in definite scientific fields. Peer-to-peer learning allows working through new concepts and language material with other peers, teaching and being taught by one another, broadening their perspectives and fostering meaningful connections. The course instructor also discusses texts organization according to particular rhetorical purposes revealing key stylistic and rhetorical features and identified recurrent patterns so that participants could gain mastery of these patterned features through their usage in various contexts. Secondly, real-world content (SciComm Domain) based on using social media in which students learn how to collaborate with each other at the intersection of diverse scientific disciplines, how to use science storytelling techniques effectively, how to create new science communication resources via social networking sites, Twitter posts, Instagram stories, science-related pages and Facebook profiles, etc. and how to share their observations and contribute to the collective construction of knowledge by discussing, supporting, or challenging ideas in interdisciplinary contexts. The selection of the course materials stems from the process of

analyzing students' needs and course objectives (Spirovska 2020). Thus, to ensure success of the course, the instructor needs to ensure a significant degree of diversity in terms of science communication attitudes and practices to facilitate students' receiving valuable feedback provided by their classmates.

3.1. Participants

The participants of the study volunteered to take a course on science communication for STEAM professionals, aimed at developing science communication skills needed to reach broader audiences through innovative dissemination channels, making research findings clearly intelligible to both specialists and non-specialists alike.

All participants signed an informed consent form and were informed that they could withdraw from the course at any point, which helped them overcome the challenge of downplaying any problems or making an attempt to present themselves in a favorable light. The participants were well aware of the purposes of the case study, i.e., to define the potential of educational reconstruction of real-world science communication in a classroom setting and to identify effective teaching strategies that can accommodate different disciplines and language levels in one class.

Prior to the start of the course, a short background survey was emailed to a total of 136 people. Those invited to complete the survey received three follow-up reminders. The survey questions focused on preliminary factors that might affect science communication experiences, including: area of expertise, level of English proficiency, and academic degree. The survey was conducted through SurveyMonkey platform. A total of 108 complete responses were received. Twenty-eight respondents did not finish the survey, and for this reason were excluded from the data analysis. The final number of respondents was $n=108$ (79% response rate).

Certain limitations concerned the gender of the participants and their age since we considered them irrelevant for our study. The data collected are displayed in Fig. 1.

3.2. Semi-Structured Interview

In order to substantiate the background survey findings, we conducted face-to-face semi-structured interviews with 108 participants to understand in compelling enough detail and in sufficient depth their research experiences, awareness of essential issues around science communication, the audiences that they work with and their approaches to social technologies, skills and training, motivation and reasons for selecting the course, and expected course benefits for academic career in the future.

The interviews were conducted separately with each of the interviewee in the form of a conversation about their needs and expectations. The interviewees were first asked to give an account of their scientific experiences. Next, they were requested to identify the obstacles they encountered in science communication. The interviews proceeded with questions about reasons for choosing the course and participants' vision of its benefits. The semi-structured format was not about strictly asking and answering questions but about the interviewee sharing stories from their own experiences of scientific interaction. Table 3 summarizes the interview questions and the coding scheme used for our analysis.

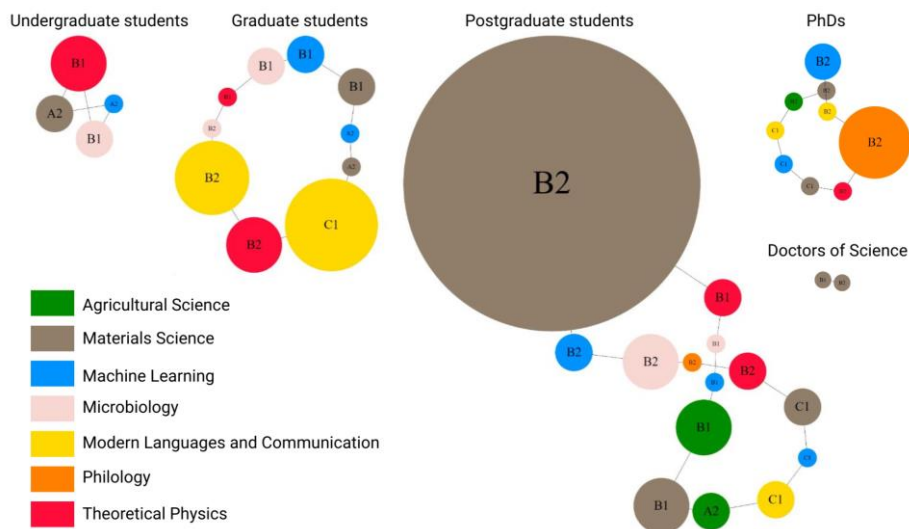


Fig. 1 Distribution of the Enrollees by their Area of Expertise, Level of English Proficiency, and Academic Degree

- (a) Undergraduate students: Theoretical Physics (n=3), Materials Sciences (n=2), Microbiology (n=2), Machine Learning (n=1); Level of English proficiency: A2 (n=2), B1 (n=2), B2 (n=3), C1 (n=1); (b) Graduate students: Modern Languages and Communication (n=21), Theoretical Physics (n=16), Microbiology (n=3), Machine Learning (n=3), Materials Science (n=3); Level of English proficiency: A2 (n=2), B1 (n=5), B2 (n=8), C1 (n=5); (c) Postgraduate students: Materials Science (n=22), Agricultural Science (n=5), Microbiology (n=4), Theoretical Physics (n=4), Machine Learning (n=4), Philology (n=1); Level of English proficiency: A2 (n=2), B1 (n=10), B2 (n=24), C1 (n=6); (d) PhDs: Philology (n=2), Machine Learning (n=2), Materials Science (n=2), Modern Languages and Communication (n=2), Agricultural Science (n=1), Theoretical Physics (n=1); Level of English proficiency: B2 (n=5), C1 (n=4); (e) Doctors of Science: Materials Science (n=2); Level of English proficiency: B1 (n=1), B2 (n=1).

Table 3 Summary of the Interview Questions and the Coding Scheme Used in the Analysis

Description	Category	Coding
Research experience	None	1
	1-5 years	2
	6-10 years	3
	More than 10 years	4
Publications	None	1
	1-5	2
	6-10	3
	More than 10	4
Types of publication(s) in (indexing) databases "In which indexing database can your publication be found?"	Russian journal in the Russian Science Citation Index (RSCI)	1
	Russian journal in the database of the Higher Attestation Commission (VAK) of the Russian Federation	2
	Russian journal in Scopus	3
	International journal in Scopus	4
	Russian journal in Web of Science Core Collection	5

	International journal in Web of Science	6
	Abstract/Conference proceedings in the Web of Science journals	7
	University journal	8
	None	9
Science communication channels “What science communication channels do you use, if any, to broadly share your expertise and research?”	Journal articles in a peer-reviewed journal	1
	SCOPUS Indexed Book Chapters	2
	Conference proceedings	3
	Lectures, workshops	4
	Social Media	5
	Science talks on TV or Radio	6
	Institutional website	7
	Summaries on a personal website, blog posts	8
	Informal chats with people at conferences	9
	Other	10
Science communication challenges/hurdles “What science communication challenges/hurdles have you faced in your academic career?”	Language considerations	1
	Communicating uncertainty	2
	Local science conventions	3
	Limited science communication opportunities	4
	Targeting broader audiences	5
	Lack of familiarity with science in general or with the scientific findings and issues related to a topic	6
	Psychological Barriers	7
	Attitude Barriers	8
	Perception Barriers	9
	Other	10
Reasons for selecting the course “Why have you decided to take this course?”	Professional development	A tally of reasons declared by a participant
	Self-imposed need to get published in high ranked journals	
	Prerequisite for my doctoral studies	
	Necessity to improve my research writing skills in English	
	Seize an opportunity for collaborative research	
	Desire to learn current trends in science communication	
	Become a more mature researcher in my discipline	
	Build interdisciplinary connections	
	Socialize in scientific community	
	Mandatory requirement for my academic position	
Terms of my effective contract		
Expected course benefits “What benefits do you expect to reap after completing the course?”	Developed professional competencies in science communication in English	A tally of benefits declared by a participant
	Stronger skills in research writing	
	Practical knowledge of international publications in peer-reviewed journals	
	“Ready-for-submission” research paper	
	Leadership in scientific community	
	Increased KPI (key performance indicators)	

An estimated frequency of participants reporting themes was recorded in this study according to the following ranking: 'all' (100%), 'most' (80–99%), 'majority' (60–79%), 'more than half' (51–59%), 'half' (50%), 'less than half' (30–49%), 'some' (11–29%), and 'a few' (1–10%) (Sandelowski 2009).

The interview revealed that most interviewees differ in the degree of research experience (2, 3, 4). Some of them had publications in highly ranked scientific journals (3, 6), whereas more than half proved to be inexperienced and their contribution to science was limited to conference proceedings (2) or publications in a local university journal (8). A few interviewees confessed being complete novice in the field of science (9). More than half interviewees reported predominantly communicating their research through such communication channels as peer-reviewed journal publications (1) and conferences (3). They also noted that the first audience for sharing their work was usually made up of their scientific advisors and heads of department (10). Only a few participants discussed their efforts to expand their communication of research findings to broader public audiences and share their accomplishments, ask questions, and get feedback on ideas from trusted and established scientists and researchers, using social media or professional platforms (5, 8, 9). Among the most frequent hurdles in communicating research ideas, the majority of interviewees recognized language considerations and lack of training for science communication readily available (1, 2), and more than half claimed that psychological barriers (7), attitude barriers (8), or perception barriers (9) negatively affected their science communication experience. Some interviewees acknowledged lack of familiarity with science in general or with the scientific findings and issues related to a topic (6). During the interviews, a number of themes emerged as being important reasons for taking a science communication course. One of such themes was the necessity to acquire language techniques to explain complex research ideas to a non-science audience. The majority of interviewees highlighted the importance of becoming a more mature researcher in their discipline able to get published in high ranked journals. More than half emphasized a necessity of building interdisciplinary connections and doing collaborative research. Less than half intended to improve their research writing skills in English, as it was required by the terms of their effective contract. A few interviewees had to choose to take the course because they wanted to learn current trends in science communication. Some of interviewees put requirements of an academic institution first. They were guided exclusively by formal motives, such as required professional development or the necessity to pass PhD qualifying exams in the English language, or increasing their KPI in order to have better salary terms.

If the interviewee spoke in generalities, prompts including specifying questions were asked. Prompts consisted of such questions as, for example: "Could you please specify what social media channels do you use to enhance your research impact?" In answer to this question some complained about the challenges of translating complex science to an easy to follow social media formats and creating accessible content which is not simplified but clear to a less specialist audience, some said that adjusting information to the audiences' knowledge was problematic while others mentioned a lack of confidence that makes it difficult to communicated assertively. Another question asked was if the interviewee could remember a specific incident when a need for improving his/her science communication skills was critical. Almost all interviewees acknowledged the fact that such a need arose such a need arose whenever they found themselves in a situation requiring intensive communication. When asked "If you have an insight during your research or if you are taking photos of your experiment that you might use in your

research talk or paper, do you tweet that insight or share your photos on social media?" almost all participants said that it had never even crossed their minds.

The most commonly reported theme while discussing interviewees' expectations from the course concerned the improvement of science communication. Some participants mentioned having a practical outcome as a paper ready for publication in English peer-reviewed journals and as a result obtaining a higher rank in an academic institution hierarchy.

The interviewees' perception of science communication proved to be so narrow that they seemed to be 'encapsulated' in their academic environment, limited to the only channel of interaction with their supervisor and department or lab staff. The most valuable outcome of science communication they mentioned was publication in high ranked journals. Obviously, they perceived themselves as passive contributors using no other ways for dissemination of their scientific findings and seeing no need for receiving feedback from wider public except for the narrow circle of people they were used to communicate (a scientific advisor, a reviewer or a journal editor). Being too local in their vision of science communication, the interviewees were good at presenting themselves as personalities in quite a few social media sources (e.g., science-related pages and Facebook profiles), but they had no idea of how to promote their research, share their findings through public channels with a broad scientific community. Thus, a challenge to overcome this disturbing situation enhanced attempts to create a course aimed at removing disconnection between researchers and their audiences.

Given the findings of our background survey and semi-structured interviews, the participants were divided into two cohorts based on heterogeneity and homogeneity of their area of expertise, level of English proficiency, and academic degree.

To populate Cohort 1, we selected 72 participants and randomly assigned them to six heterogeneous groups (G 1-6, experimental groups) with 12 participants in each group to ease the process of teaching (Appendix A). In all heterogeneous groups, we had a mixture of graduate students who have a good command of English and have had formal training in research writing but have little or no scientific data to share, doctoral candidates who have data to publish or speak about but are unfamiliar with how to share their research outcomes within and beyond their research-specific community, and establish STEAM professionals who have considerable experience in communicating about new research technologies and breakthroughs, but they only do it in their native language and within the context of the deficit model of communication, when "[they throw knowledge] into the world, with the hope it inspires a change' (Stine 2021, 12).

The participants came from different subject areas with diverse backgrounds and skills across both arts and science: Materials Science, Theoretical Physics, Philology, Agricultural Science, Microbiology, Machine Learning, Modern Languages and Communication. We were fortunate to have "hard" sciences participants who tend to rely heavily on the deficit model to communicate their knowledge and "soft" sciences participants who mostly rely on the dialogue model, as there is a deeper understanding of the human component (Stine 2021, 15)

Intentionally, they were not given an English placement test, as the objective was to create a learning environment that could most closely resemble real-world communicative situations, with interlocutors having different levels of the English language proficiency. Their level appeared to be quite heterogeneous, i.e., from A2 to C1, according to the Common European Framework of Reference for Languages (CEFR).

For Cohort 2, we arranged three almost homogeneous groups – Group 7 (G7 control group) – with the same subject area (Materials Science), level of English proficiency (B1-B2),

and academic degree (postgraduate students); Group 8 (G8 control group) – with the same subject area (Modern Languages and Communication), level of English proficiency (B2-C1), and academic degree (graduate students) and Group 9 (G9 control group) – with the same subject area (Theoretical Physics), level of English proficiency (B1-B2), and academic degree (graduate students). The total number of participants in each group was 12. The level of English language proficiency ranged from B1 to C1, which was appropriate for the purposes of the course. The reason for choosing level B1 as appropriate for the course purposes can be justified by the fact that the minimum level for successful science communication is B2/C1 or a level no lower than B1 when speakers can understand the main points of clear standard input on familiar matters regularly encountered in their professional settings.

The selection of graduate and postgraduate students for Cohort 2 was based on two reasons: the significant number of graduate and postgraduate students who volunteered to participate in the case study and who specialized in Materials Science (n=22), Modern Languages and Communication (n=21) and Theoretical Physics (n=16), necessity of graduate students to participate in coauthoring and publishing an article to enter the Postgraduate Program and postgraduate students to meet the mandatory requirement to produce at least 2-3 publications before their PhD defence.

3.3. Class Observation

All the participants (assigned to either Cohort 1 or Cohort 2) were regularly observed during the course studies. Observation research was chosen since it provides an opportunity to monitor participants' performance in natural settings and is considered reliable being long-lasting and, thus, frequently used in combination with other methods. To monitor the performance, we measured several variables for each student and aggregated them by cohorts. Then we applied statistical methods to analyze how performance depends on the Cohort.

To compare performance in Cohort 1 (experimental groups) and Cohort 2 (control groups), we use two-sample Welch's t-tests with the null hypothesis that the samples have equal means (Welch 1947).

In our case study, live observation tools in the form of templates (Appendix B) were used as research instruments to judge students' performance. Frameworks of teaching effectiveness in both cohorts embraced observation categories characterized by organizational, social, and instructional processes (Eccles and Roeser 2010). Observational items that helped us capture general classroom dynamics were as follows: students' attendance, involvement (equitable participation in group work through students' contributions to classroom dialogue), attention, self-direction, and teamwork (active peer-mentoring).

Table 4 Observed Students' Performance via Surveys
(Average Teacher-assessed Scores Divided by 4)

Variable	Cohort 1 (experimental)	Cohort 2 (control)	Two-sample Welch's t-test p-value
Attendance	90%	74%	$1.4 \cdot 10^{-4}$
Involvement	95%	67%	$3 \cdot 10^{-8}$
Attention	97%	70%	$2 \cdot 10^{-8}$
Self-Direction	95%	77%	$5 \cdot 10^{-6}$
Teamwork	97%	74%	$3 \cdot 10^{-7}$

Course instructors registered the attendance data after each class (Variable 1). Engagement in classroom activities (participation in discussions (Variable 2), constant concentration on the given tasks (Variable 3), self-direction (Variable 4), active peer-mentoring (Variable 5) were scored by a teacher (1–4) based on evidence of almost no evidence (Score 1), limited evidence (Score 2), evidence with some weaknesses (Score 3), or consistent strong evidence (Score 4). During the observed lesson session, a template with basic descriptors of what happens (e.g., students provide ideas with reasoning, students pay attention) at regular time intervals (e.g., one description per lesson) was filled out by a course instructor.

Our correlation analysis obtained from the observation scores of both cohorts at the end of the course showed that participants in Cohort 1 (heterogeneous) had a more positive correlation with their attitude and awareness of science communication, which made us believe that there was a direct relationship between multilevel and multidisciplinary character of the group and students' feeling at ease with scholarly interaction (Table 4).

At the end of the course a retrospective qualitative questionnaire (Appendix C) was given to the course participants. The questionnaire was meant to reveal if self-assessments took the difference between a student's perception before and after a course into account. We chose to focus evaluation on these variables: V1 - perceived improvements in motivation, V2 - self-efficacy, V3 - self-confidence, V4 - science communication knowledge, and V5 - behavior resulting from science communication training (Rodgers et al., 2020). V1 represents the degree of persistence and the extent of effort to which a participant is committed to improving his/her science communication skills. V2 represents a participant's belief or conviction about being able to communicate research outcomes clearly and engagingly to diverse audiences using innovative dissemination channels. V3 presents an ability to maintain a clear and simple message about complex research, while also acknowledging scientific uncertainty. V4 represents a participant's knowledge of communication concepts, skills, and tactics for communicating with various audiences. V5 represents the ability to communicate succinctly and engagingly with nonscientist audiences.

The questionnaire, based on the Likert response scale (1 = strongly disagree; 5 = strongly agree), contained 20 items to explore the viable factors from classroom experiences and the participants' perception of the course and teaching strategy, interpersonal interaction, and feedback around science communication.

The thematic focus in the analysis of both cohorts' sets of qualitative data was participants' comments on their own broadly positive or neutral attitude and feeling comfortable with science communication in the English language after completion of the course. Both cohorts demonstrated different results concerning their perception of the course. Our findings from the datasets indicated strong associations between participants' engagement and aspects of the course they studied.

In general, the obtained results highlighted positive shifts in Motivation (Positive Attitude), Self-Efficacy, Self-Confidence, Science Communication Knowledge, and Behavior (Cooperative Learning) in Cohort 1 in comparison with Cohort 2 (Table 5).

Table 5 Observed Performance via Post-training Surveys
(Average Self-assessed Scores Divided by 5)

Variable	Cohort 1 (experimental)	Cohort 2 (control)	Two-sample Welch's t-test p-value
Motivation	94%	58%	$2.5 * 10^{-10}$
Self-Efficacy	93%	46%	$8 * 10^{-15}$
Self-Confidence	93%	53%	$7 * 10^{-13}$
Science communication knowledge	93%	63%	$5 * 10^{-11}$
Behavior	87%	52%	$2 * 10^{-12}$

We regarded a positive change in these measures as indicators of successful science communication training. Both cohorts' attitudes changed as measured by a questionnaire.

4. DISCUSSION AND CONCLUSION

Heterogeneous classrooms – multilevel, multilingual, multicultural, or multidisciplinary – are a fact of life in ESL programs around the world. The phenomenon of a multilevel and multidisciplinary class in teaching science communication reflects modern tendencies of science going global, breaking boundaries between scientific schools and communities. The things that make a multilevel class the most challenging are also often what make it the most vibrant as well (Hernandez 2012). Heterogeneity facilitates an opportunity for students to produce the best possible output for this ability. They can learn to listen to each other in a way that is cooperative and productive to the learning process, this is what Vygotsky points out with the idea of the zone of proximal development (Fritsche 2021, 22). The difference between the current level of cognitive development and the potential level of cognitive development (proximal development by Vygotsky 1978) may be reduced with the help of certain multilevel and metacognitive strategies: modeling real-life situations, learning through interaction with peers and communicating with lay audience broadening the scope of narrow scientific communities.

In this study, we investigated the effect of immersion into multidisciplinary science context on the English learners' motivation to communicate their research findings to a target audience with various levels of comprehension of the discipline and non-specialists through traditional and innovative dissemination channels (RQ1). Given the class observation of two cohorts of students (heterogeneous – Cohort 1 and homogeneous – Cohort 2), we assessed the education gains from two perspectives: a teacher-centered based on the degree of evidence and student-centered based on shifts in attitude. Findings from the datasets indicated strong associations between participants' engagement and the type of cohort. During class observation from the part of a teacher, the selected measurable variables: students' attendance, involvement, attention, self-direction, and teamwork proved to be higher in heterogeneous group than those of homogeneous group. The qualitative analysis of students' questionnaires demonstrated that motivation, behavior, self-efficacy, self-confidence and science communication knowledge in homogeneous and heterogeneous cohorts represented modest but discernible changes. For example, Cohort 2 tended to be neutral in participants' evaluation of the course in terms of science communication competence, whereas Cohort 1 was more

positive. As the statistical analysis demonstrates, all variables in Cohort 1 are significantly higher on average than in Cohort 2 (p-value $\ll 0.001$).

Thus, in the course overview, we made an attempt to reveal how learners with different levels of language competence may effectively communicate with one another to exchange research ideas (RQ 2) and what teaching strategies can accommodate different disciplines and language levels in one class and cater to learners' needs in a less toilsome and time-consuming way (RQ 3). This research suggests that heterogeneous ability groups are more successful from a student perspective where students can benefit from innovative dissemination channels that go beyond traditional academic publishing: e.g., learning from their peers and get feedback from lay public. The two educational domains: quasi-professional content (peer-to-peer collaboration) and integration of social media contributed to reducing limitations, which occur when teaching English in multilevel and multidisciplinary classes.

For accommodating different languages and levels in a single classroom certain meta cognitive strategy should be used, such as science storytelling techniques, creating new science communication resources via social networking sites, Twitter posts, Instagram stories, science-related pages and Facebook profiles and designing selfie-style videos and/or podcasts. We hope that the proposed approach of bringing a liberal arts component into a science communication classroom will eventually lead to the development of complex methodology, capable of using heterogeneous character of students to the utmost advantage.

Despite the results obtained, more research is needed on partially heterogeneous groups to determine how they will acquire English science communication skills compared to the homogeneous in all respect, if, for example, their level of English is the same, but they have different specialties, or vice versa, or, if they have one specialty, but different levels of English. It could be our next objective in the future to achieve.

DECLARATION OF COMPETING INTEREST: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as potential conflict of interest.

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APPENDICES

A Distribution of Participants in Heterogeneous (G1-6/Experimental) and Homogeneous (G7-9/Control) Groups

Group	Cohort	Members	Agricultural Science	Materials Science	Machine Learning	Microbiology	Modern Languages & Communication	Philology	Theoretical Physics	Total number of students
G1	Experimental	English Level	B1	A2/B1/B1	A2/C1	B1	B2/B2	C1	B1/B2	12
		Academic degree ¹	DC	U/Dc/DSc	U/PhD	U	G/G	PhD	U/DC	
G2	Experimental	English level	B1	A2/B1/B2	A2/B1	B2/B2	B2	B2	B1/B2	12
		Academic degree	DC	G/DC/PG	G/G	DC/DC	PhD	DC	U/G	
G3	Experimental	English level	B1	B1/B2	B1/C1	B1	B2/C1	C1	B1/B2	12
		Academic degree	DC	G/DC/DSc	DC/DC	U	G/PhD	PhD	G/DC	
G4	Experimental	English level	A2	B2/B2/C1 /C1	B2	B2	B2/B2	C1/B2	B1	12
		Academic degree	DC	DC/DC/DC/ PhD	PhD	G	G/G	PhD/DC	DC	
G5	Experimental	English level	A2	B2/C1/B2	B2/B2	B1/B1	B2/B2		B2/B1	12
		Academic degree	DC	DC/DC/PhD	DC/DC	G/G	G/G		G/DC	
G6	Experimental	English level	B2	A2/B1/B2	B1	B1/B2	B2/B2	C1	B1/B2	12
		Academic degree	PhD	U/G/DC	G	DC/DC	G/G	PhD	U/PhD	
G7	Control	English level		B1/B2						12
		Academic degree		PG/PG						
G8	Control	English level					B2/C1			12
		Academic degree					G/G			
G9	Control	English level							B1/B1	12
		Academic degree							G/G	

¹ U – Undergraduate; G – Graduate, PG – Postgraduate, PhD – Doctor of Philosophy, DSc – Doctor of Science

B. Observation Template

Cohort	Variable 1 Score (1-4)	Variable 2 Score (1-4)	Variable 3 Score (1-4)	Variable 4 Score (1-4)	Variable 5 Score (1-4)
	Attendance	Involvement (participation in discussions) a) Building on ideas b) Making reasoning explicit	Concentration on the given task (student pays attention)	Self-direction (student gets responsibility through freedom of choice)	Teamwork (active peer-mentoring)
St 1					
St 2					
St 3					
St 4					
St 5					
...					

C. Questionnaire

Please, rate how strongly you agree or disagree with each of the following statements by placing a check mark in the appropriate box:

	Defined Variable	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
Perceived improvements in motivation						
1	As I gained experience with science communication strategies, my motivation has increased, and I have a much higher degree of autonomy to create new science communication resources via social networking sites, Twitter posts, Instagram stories, science-related pages, etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	I see the value and utility of what I was learning during the course.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	I feel more empowered, exposed, and connected to professional academic social networks.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	I feel dedicated to finding innovative ways to enhance my science communication efficiency and overcome any communication barriers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self-Efficacy						
5	I have developed an ability to demonstrate my research ideas and make them openly and easily understandable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	I can now use science communication tools and techniques in a way that appeals to and engages a broader audience into a two-way information sharing dialogue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	I am capable to connect with diverse audiences through good storytelling.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Self-Confidence						
8	I feel more prepared for discussing issues of science communication with other researchers whose level of English is higher/lower than mine.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	I better understand my strengths and weakness in science communication and I am more prepared to share information through digital applications such as Facebook, Twitter, and Instagram.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	I feel more confident to disseminate my scientific findings via social media platforms and interpret my research for a target audience with various levels of comprehension of the discipline.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	I am capable of successfully pitching my scientific ideas to a broad range of audiences.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	I perceive that the challenges of science communication are within my abilities, and I am capable of overcoming barriers that prevent effective communication.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13	After the course, I no longer feel frustrated that I might be lacking English language proficiency comparable to English L1 speakers to communicate assertively	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Science communication knowledge						
14	The course helped me fill gaps in knowledge about how to translate scientific findings to scientists beyond my immediate community and non-professional audiences.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15	I gained better understanding of science communication concepts, tools, techniques, and practices available to researchers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16	I now have an idea how to communicate scientific outcomes simplifying and complicating normal scientific discourse.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Behavior resulting from science communication training						
17	I can amend the communication to the level of knowledge of the target audience.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18	I no longer view my science communication activities as problematic or unnecessary.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19	After the training, I use more metaphors, analogies, or narrative techniques in explaining my research to a non-scientist audience.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20	After the training, I use less jargon, abstract language, and try to avoid complexity and non-verbal behavior that could distract audience members.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Review research paper

LEARNING BY DOING: THE BENEFITS OF ADOPTING AN ONLINE NEGOTIATION SUPPORT SYSTEM INTO AN ENGLISH FOR ACADEMIC PURPOSES COURSE

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Abstract. *The paper reports on the benefits of imbedding an online negotiation support system (NSS) into the experiential learning framework of an English for Academic Purposes (EAP) course. Proponents of experiential learning projects in the second/foreign language classroom emphasize the benefits of learning by doing. To test the claim, the performances of students in two advanced level EAP courses at Carleton University, Ottawa, Canada, were compared. One course was developed with the principles of content-based (CBI) instruction, with input primarily from academic texts; the other course also used content-based instruction but was enhanced by an experiential learning project for which the online negotiation system was adopted. Participation in the project provided a novel learning experience for second language learners at Carleton, with counterparts from universities in three additional countries (Austria, Poland, and Taiwan) also participating. A statistical analysis of student grades showed that the students in the EAP course enhanced by the experiential learning project obtained significantly higher grades on the final assignment in comparison to the students in the “traditional” CBI course.*

The paper also demonstrates that this teaching and training system enhances learning by promoting learner autonomy, critical thinking, and academic language development. Relevant aspects of the experiential learning project led to enhanced learning outcomes, supporting the claim that learning by doing benefits language acquisition. The paper proposes a new experiential learning model, applicable to ESP/EAP instruction, i.e., the sustained-content experiential learning model which can be applied to any project that emphasizes learning through direct experience. The model depicts the importance of sequencing academic content tasks that build on each other allowing learners to accumulate knowledge and language and prepare them to engage in a meaningful, authentic communication. It also illustrates the importance of using reflection as an effective learning tool that helps develop critical thinking and analysis, skills necessary for academic success.

Key words: *ESP/EAP, online negotiation support system, content-based instruction, sustained-content instruction, experiential learning*

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1. INTRODUCTION

Over the last twenty years, the demand for receiving degrees from universities where English is the language of instruction has been growing at a high pace among international students. Canada ranks third in global student attraction after the United States and Australia. Between 2009 and 2019 the international student population tripled. Nearly 50% of international students study in Ontario; 60% intend to become permanent residents (statista.com). Those who return home after graduation have enhanced opportunities to find employment with companies and institutions that need people with English language skills.

The study described in this paper was conducted at Carleton University in Ottawa, Ontario. Like many other English-speaking Canadian universities, Carleton receives many applications from overseas students. One of the admission requirements is adequate level of English as determined by internationally recognised tests, i.e., TOEFL, IELTS, DUOLINGO. Those applicants whose test score falls below the required level are offered an opportunity to take English for Academic Purposes (EAP) courses. The courses aim to bring non-native speakers of English, to the level of academic language proficiency where English is no longer a barrier to success in their programs of study. The courses use methodological frameworks imbedded in learning theories and teaching methods that promote development of academic communication skills, learner autonomy and critical thinking. They are designed using instructional approaches of content-based instruction (CBI) and, more recently, experiential learning. Determining which of the two approaches is more effective in teaching EAP motivated the study which compares the learning outcomes – measured by students' final grades – in courses that follow the CBI approach with courses that follow the experiential learning approach.

The instructional models of CBI and experiential learning are rooted in the same linguistic and cognitive theories and reflect the interactional view of language acquisition (Richards & Rodgers, 2014). Both aim to integrate content and language learning. Typically, they use tasks as a pedagogical tool. The main difference between the two approaches is that CBI relies predominantly on input from texts, while in experiential learning, the focus is on “learning by doing and reflecting”. What follows is a brief overview of content-based instruction and experiential learning.

1.1. Content-based instruction

Content-based instruction (CBI) is one of the “spin-offs” of communicative language teaching (C. R. Rogers & Freiberg, 1994). It aims to develop communicative competence in the target language along with content knowledge in a specific subject area, (Oxford, 1993). CBI provides a flexible format and allows for the inclusion of a variety of teaching techniques, practices and strategies, such as project-based, task-based and experiential learning. The methodology is based on the premise that language is most effectively acquired through exposure to content and discourse features of context. Focus on the development of sociolinguistic rather than grammatical competence is central to CBI (Stryker & Leaver, 1997).

CBI courses at the tertiary level aim to develop academic literacy, that is, the ability to understand complex linguistic structures, interpret and analyse information and deconstruct concepts presented in academic texts. Courses at this level use extensive reading and listening materials to expose learners to the academic discourse patterns and sociolinguistic conventions. The teaching strategies involve careful planning of tasks that target linguistic and

critical thinking skills and guide students step-by-step through processes of information gathering, evaluation and synthesis. The tasks are planned around the integration of the four language skills and focus on engaging students in meaningful and authentic language use. (Brinton & Snow, 2017; Kasper, 1997; Marcia Pally, 1997).

The most commonly used CBI model is the theme-based model (Dueñas, 2003). Central to a theme-based course is a theme, which serves as an organizing principle for course design. There are two types of theme-based models:

1. *The thematic units model*. Courses that follow this model are designed around a series of thematic units. The teacher selects authentic texts for each topic and prepares tasks and activities aimed at developing learner's knowledge of the topics and academic language (Brown, 2007; Kasper, 1999).
2. *The sustained-content model*. Courses that follow this model are designed around one umbrella theme, which learners study over the duration of the term. The teacher selects a variety of texts on the theme and prepares tasks and activities that help learners develop a certain amount of expertise on the subject while developing academic language and critical thinking (Marcia Pally, 1997).

Both models offer an appropriate framework to prepare students for the challenges of studying at English language universities. The sustained-content instruction has the advantage of bringing students closer to authentic academic study as the courses simulate mainstream university classes. Research indicates that the exploration of one subject area over a longer period of time builds not only content knowledge and language but also lends itself to the development of critical thinking (Kasper, 1997; M. Pally, 2000). Through reading, listening, writing, and speaking about one theme, students develop academic language and study skills which are transferable to mainstream courses.

1.2. Experiential learning

The following section gives a brief overview of learning theories that promote learning through experience. The methodological frameworks of learning through experience were first developed for professional training and later adapted for language instruction.

In the first half of the 20th century, Dewey (1938) formulated a scientific method of learning. His work laid the foundations for project-based learning, a teaching strategy that challenges students to solve problems, thus making project participation a meaningful and effective experience. Building on Dewey's work, Kobl (1984) formulated experiential learning theory, which posits that experience is a source of learning and development, and that knowledge is created through the transformation of experience. He proposed a four-stage model of the learning cycle: (1) *experience* (involvement in the experience), (2) *reflective observation* (reviewing of the experience), (3) *abstract conceptualization* (logical analysis, critical thinking), and (4) *active experimentation* (using new ideas learned from experience). Kobl saw learning as a holistic process grounded in real life experiences. A crucial element of his model is reflection, i.e., learning takes place not so much through doing but "through reflection on doing" (op. cit. 1984, p. 38). According to Knutson (2003, p. 54), "experience-based, project-based, and task-based become experiential when elements of reflection, support, and transfer are added to the basic experience, transforming a simple activity into an opportunity for learning". Moon (2013) further explored the relationship between experiential learning and reflection in the second language acquisition context and pointed out that both

imply emotional involvement, which indicates a deeper approach to learning and greater effectiveness.

The proponents of experiential learning projects in second language classroom indicate that the learners' personal involvement in the process, both emotional and cognitive has positive effect on language and cognitive development (Moon, 2013; C. R. Rogers & Freiberg, 1994). Although the projects may be based on individual work, the learning benefits of working collaboratively in the target language have been emphasized because collaboration requires the use of a language's social and communicative functions (Firth, 1995; Wilhelm, 1999). According to socio-cognitive theory of cognitive development (Vygotsky, 1997), knowledge is a social construct and cognitive development is the result of social interaction. Sharing ideas and perspectives and collaborating on joint problem solving promote social development and help students progress from a lower to a higher level of language skills and knowledge.

Experiential learning projects are often built around one or more problems that students need to analyze and solve. The benefits of implementing problem-solving techniques in language courses have been widely discussed. Burke (1996) argues that problem-solving makes language activities meaningful as it relies on students' natural tendency to figure things out, which enhances language acquisition. Norman and Schmidt (1992) point out that problem-based learning contributes to intrinsic motivation and develops self-directed learning skills, which tend to be maintained. Thomas (2000) shows that students in schools, which implemented problem-based learning demonstrated significant improvement on standardized tests of academic achievement.

There are many types of experiential learning models which are used as a classroom management tool (Moon, 2013) in projects or syllabi. Although they differ depending on the context, teaching philosophy and the amount of autonomy given to the learners (Fleming & Walter, 2004; Mohan, 2015), they all focus on employing different forms of active learning including, project-based, problem-based, and task-based learning (Blake, 2016; Ellis, 2003; Skehan, 2003; Vygotsky, 1997; Willis & Willis, 1996). Examples of experiential learning models are given below:

1. *The task-based projects model* proposed by Legutke and Thomas (1991) focuses on a research project. It begins with the preparation of second language learners for group work and the explanation of the concept of communicative language teaching, followed by topic selection, research and data collection, presentation and evaluation. Tasks are designed by the teacher, but the students have certain amount of autonomy in deciding on the topic, planning the project, and the use of materials.

2. *The experiential syllabus model*, proposed by Kenny (1993, p. 436) – a strong proponent of the learners' autonomy—is designed to “facilitate autonomy itself”. The course's main objective is learning to write an investigative report. The students move gradually from the initial preparatory task-based work (theoretical foundations) to experiential work. The cycle of learning involves initiating a piece of work, formulating themes, and clarifying investigative research, carrying out pieces of work, discovering solutions, realizing personal growth, and defining new fields. Kenny's model gives the students full autonomy over the learning process.

3. *The content-based experiential learning model* proposed by Mohan et al. (2015) defines Kobl's cycle of learning in terms of discourse and focuses on the relationship between context, discourse, and academic language development. The four phases are labelled using different types of discourse (action discourse, particular reflection:

reporting, general reflection, and testing new concepts against experience). The model is based on the design of two mainstream school and college courses which employed experiential learning – one on magnetism and the other on marketing. The courses have a theory-practice structure; they use a wide range of discourse types and a series of academic content tasks.

To make the distinction between mainstream courses that teach content and courses that teach language through content the author proposes the fourth type of an experiential learning model:

The sustained-content experiential learning model. Like in the other models, the learning begins with preparatory tasks aimed at language development (academic discourse) and content (theoretical foundations) and moves gradually to learning through experience.

Advocates of experiential learning in second language classrooms stress many benefits of learning by doing. However, to the best of the author's knowledge, no comparison of language courses that use content-based models and the courses that implement experiential learning was done.

Hypothesis

Consideration of the benefits of experiential learning, provided grounds for the following hypothesis:

Sustained-content experiential learning gives better learning outcomes than sustained-content learning, as measured by students' grades.

To test the hypothesis the grades of students enrolled in two advanced level EAP courses, which employed two different methodological frameworks, i.e., the sustained-content and the sustained-content experiential learning, were compared. The sustained-content course is later referred to as the text-based learning (TBL) course. The sustained-content experiential learning course is further referred to as the experience-based learning (EBL) course. Both courses used academic texts and were designed around tasks and problem-solving activities aimed at developing a deeper level of understanding of the subject area, critical thinking skills and language. However, the TBL, relied on the use of texts as the main source of input and in EBL, an experiential learning project was added. The project work in EBL involved the use of digital technology, namely, an online negotiation support system. The contribution of digital technology to experiential learning projects in language classes is discussed below.

2. DIGITAL TECHNOLOGIES IN LANGUAGE TEACHING

Digital technologies in second language education have undergone many stages of development from the behaviourist and communicative to the integrative stage. Since their onset, digital technologies have created new opportunities for involving second language learners in collaborative projects between groups of students in different locations. Because of its ease of use, email-based communication was found particularly useful early on (Warschaer, 1996) and the pedagogical advantages it offered were recognized by teachers and researchers (Inoue, 1999; Kroonenberg, 1995). More recently,

computer-mediated communication tools, such as chatrooms, and computer-assisted language learning, tutorial software and internet-based activities, entered the L2 classrooms. Their incorporation into language courses supports the widely accepted notion that knowledge is constructed through communication and interaction.

However, these technologies have also been criticized for an ad hoc use and lack of clear pedagogical focus or sense of direction (Barker, 2000). To be successful, projects that involve communication between participants in different locations require close collaboration not only between students but also between teachers who have to jointly coordinate every aspect of the project, including preparation of tasks and assignments, structuring of activities, creation of groups, matching students, close coordination of students' work, and monitoring interaction. (Kersten & O'Brien, 2011). A recently conducted study showed that ESP practitioners tend to use basic, rather than more advanced technology; they use technologies that they are familiar with. The authors of the study suggest that integrating more advanced technology in teaching practices may require training (Constantinou & Papadima-Sophocleous, 2020). As will be demonstrated below, integrating the online negotiation support system Inspire did not require special training.

2.1. Computer-mediated communication and computer assisted language learning

Over the last 30 years numerous computer-mediated communication (CMC) and computer-assisted language learning (CALL) programs have been developed for L2 learners. Recent studies of technology use for language teaching show that task-based language teaching and technology mediated instruction are “a natural match” because the two approaches “share a series of theoretical antecedent, including project-based, content-based and experiential learning (M. Thomas, Reinders, & Warschauer, 2013, p. 5).

In his review of digital technologies promoting L2 development, Robert Blake (2016) examines the advantages of computer-mediated communication and computer-assisted language learning programs and activities, concluding that to be effective these technologies should be used within the framework of task-based language teaching (TBLT) with roots in experiential learning (Gonzalez-Lloret, 2015). Relevant tasks are defined as goal-oriented activities, which involve problem-solving, analysis and sharing of ideas which foster authentic language use (Blake, 2016; Mayo, 2015; M. Thomas et al., 2013; Willis, 2021). To be effective, the activities must be carefully planned and structured (Skehan, 2003). The principle of careful preparation and planning applies to the use of all types of digital technologies. Courses that use technology should thus involve putting together pedagogically sound tasks supported by the specific technology and sequencing of activities within the tasks (Blake, 2016; M. Thomas et al., 2013).

In the case of ESP and EAP, technologies developed and used for training students and professionals in different academic fields may be used to enrich and enhance the ESP/EAP students' learning experience. The technologies developed for solving and/or simulating real-life problems incorporate professional knowledge and provide an authentic setting for learning. They may require preparation of additional materials and initial guidance by instructors, but they provide an environment that students may find attractive and stimulating. They can be adapted to ESP/EAP in a similar way as academic texts, but they add an interactive component (Kersten, 2017).

2.2. Analytical and knowledge-based systems

Today, many web-based systems provide analytical capabilities and knowledge in addition to their communication and interaction functions. Of particular interest to language instructors should be those online analytical and knowledge-based systems that support collaborative work and provide an environment in which students can engage in purposeful communication that aims at joint problem solving. Examples of such systems are group decision support systems (e.g., groupVision; Prism GDSS) and negotiation support systems (e.g., SmartSettle; Negoiist; eNego). One of the negotiation support systems, Inspire (<https://invite.concordia.ca/inspire/about.html>)*, was used in the experience-based learning (EBL) course discussed in this paper.

Negotiations are, in essence, problem-solving activities that rely heavily on communication. Their inclusion in language classes can therefore be an effective way of practicing language. Both face-to-face and online role simulations make communication purposeful and meaningful, as the learners “use language to achieve a real outcome” (Willis & Willis, 1996 p. 53). However, certain aspects of electronic negotiations render them more beneficial for learning than face-to-face exchanges. To begin with, they are more realistic – they give the learner much greater control of the process and the outcomes because the instructor is removed from the activity. Also, because negotiations are asynchronous, they give the participants as much time as they need to respond to their counterparts and thus encourage reflection. Furthermore, the system records all the negotiation activities, so when the process ends, the participants can access the records and reflect on their experience. Finally, the anonymity, the fact that negotiating counterparts do not know each other, removes the element of playing it “safe” associated with face-to-face negotiations with classmates (Holtom & Kenworthy-U'Ren, 2006).

3. EAP COURSES AT CARLETON UNIVERSITY

English for Academic Purposes Program at Carleton University offers three levels of EAP courses: introductory, intermediate, and advanced. Each course is a full credit course and involves six hours of instruction per week over the period of one term (13 weeks). Concurrently to taking an EAP course, students are allowed to take a limited number of mainstream courses in their program of study. At the introductory level, they can add one course from the degree program at the intermediate level – two, and at the advanced level – three. Upon successful completion of the advanced level course (70% exit requirement), they may become full time university students. The participants in the study were enrolled in two advanced level EAP courses, one used the text-based learning (TBL) model and the other experience-based learning (EBL) model.

3.1. The TBL and the EBL models

The text-based learning (TBL) and the experience-based learning (EBL) are two formats of the advanced level EAP course. Both were prepared and taught by the same teacher. Both were designed within the framework of sustained-content instruction, with the focus on the development of academic language and critical thinking skills through the exploration of the course theme. The instructor was responsible for choosing the theme, selecting reading and listening materials, preparing language and content focused

tasks, activities, and assignments, as well as assessing students' performance. There was no examination at the end of the term; the final grade was the average of the grades obtained by the students throughout the term.

3.1.1. *The TBL and the EBL course design: similarities*

Both courses had the following main components: (1) coursepack, (2) research project, (3) analytical skills practice module, and (4) final assignment.

1. The course-pack was divided into three sections: a) language activities and guidelines for writing critiques; b) theoretical readings from literature on the course theme accompanied by language and skills development activities; and c) cases for practicing analytical skills.
2. The independent research project had three objectives: (1) to build the students' knowledge of a specific aspect of the course theme or of their academic interest; (2) to develop library research skills; and (3) to promote independent learning.
3. To practice analytical skills the learners were given different cases or situations to analyse, using the theoretical concepts introduced in the preparatory phases of the course.
4. The final assignment was a report. It was an in-class, open book assignment in which the students analyzed a case.

3.1.2. *TBL model: course description*

The umbrella theme for the TBL course was *diffusion of innovations*. The course followed a sustained-content model and had a five-phase structure. The tasks and activities within each phase built on each other, developing learners' understanding of the content and language. There was a progression of difficulty of coursework between phases and each phase prepared the learners for the tasks in the next phase. Parallel to work done in the classroom, each student conducted an independent research project. The TBL course design is depicted in Fig. 1.

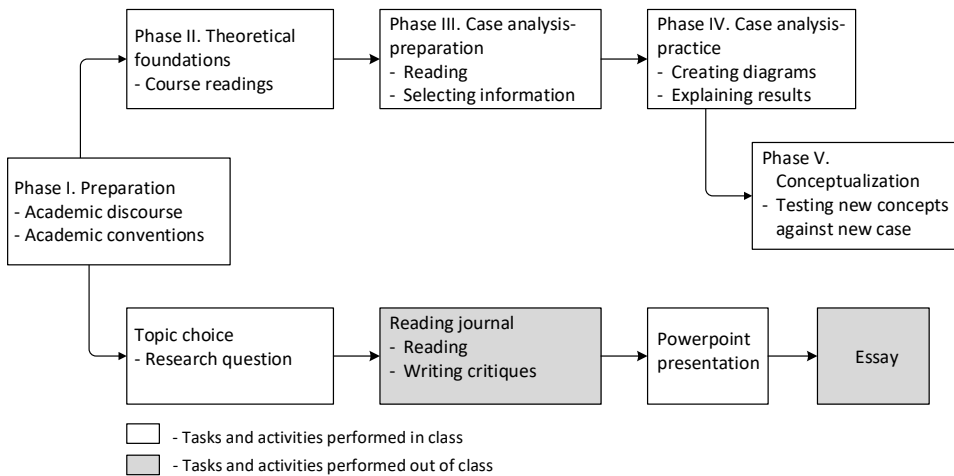


Fig. 1. The TBL course design: a sustained-content model

Phase I: *Preparation* focused on the introduction of specific aspects of academic discourse, including: (1) features of academic books, journal articles, and critiques; (2) language of reporting, evaluation, and analysis; and (3) academic conventions and academic integrity policies. This phase prepared the students for both the independent research project as well as for the course readings and assignments.

Phase II: *Theoretical foundations* introduced course readings on theory of innovation diffusion (E. M. Rogers, 2001) accompanied by language tasks and activities aimed at the development of academic language and study skills. The readings explained basic concepts and definitions related to the topic and provided examples and analyses of successful and failed innovations. The illustration of how theoretical concepts are used to analyze cases prepared the learners for the next phase.

Phase III: *Case analysis-preparation* involved analyzing two innovations: the telegraph and the printing press. The same procedure was followed in both cases, i.e., the students read the text about the history of the innovation, took notes, and discussed its content in groups. Then, working in groups, they selected information that would be used to analyze its diffusion and moved on to phase four.

Phase IV: *Case analysis-practice* involved working in groups to prepare graphs that depicted innovation diffusion (first, the telegraph, then the printing press). Finally, volunteers presented the graphs with explanations in front of class to get classmates' and teacher's feedback; class discussion followed. These tasks prepared the students for the final phase.

Phase V: *Conceptualization* was the final assignment, a report that tested the ability to apply theoretical concepts to the case, as well as language and academic conventions. The students were given reading on the history of the radio. After acquainting themselves with the case, they discussed radio's diffusion in groups. Then they wrote a report following the guidelines that were provided. They were encouraged to use all relevant materials used over the term.

The independent research project was conducted mostly out of class. Each student had to: identify the topic that he/she intended to investigate, formulate a research question and search for sources. Once a week, over the period of five weeks, each student submitted a reading journal entry. At the end of the term, each student gave a presentation and wrote an essay.

3.1.3. EBL model: course description

The umbrella theme for the EBL course was *decision making and negotiations*. The course followed the sustained-content experiential learning model. The tasks and activities within each phase were sequenced in order to build content knowledge and language and prepare the learners for hands-on experience with online negotiations. Each student concurrently conducted an independent research project. The EBL seven-phase model is shown in Fig. 2.

The course began with Phase I *Preparation*, which was the same as in the TBL course. It prepared learners for course readings and assignments, including the independent research project.

Phase II *Theoretical foundations* comprised readings on the course theme. Students first read a chapter on decision making (Mayer, 1982) and then a chapter on negotiations (Lewicki, Barry, Saunders, & Minton, 2003). While working on the readings, the learners

engaged in tasks and activities aimed at developing content knowledge, as well language and learning skills. Each book chapter included cases of decisions and negotiations and their analyses. The analyses provided an illustration of how theoretical concepts can be used to explain specific decisions or negotiation outcomes. The learners applied skills and knowledge learned in this phase in the following phases.

Phase III *Hands-on experience* involved two face-to-face bilateral negotiations between teams of three participants. The first one was a contract negotiation between a young writer and a publisher. The second concerned a scarce supply of a fruit that two companies needed and had to come to an agreement to obtain it. In both cases, each team received a detailed description of the situation and had to prepare a team strategy before entering the talks.

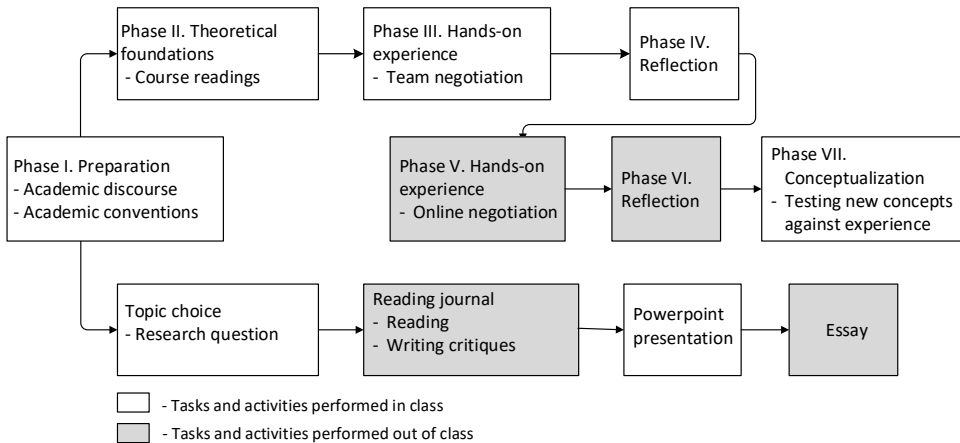


Fig. 2 The EBL course design: a sustained-content experiential learning model

Phase IV was an informal written *reflection* on the process and outcomes of the two negotiations.

Phase V *Hands-on experience* involved asynchronous online negotiations conducted individually by each student (see Section 5).

Phase VI *Reflection* had two components: an ongoing reflection on every step of the negotiation which was recorded in a negotiation journal as well as an evaluation, based on a short questionnaire embedded in theory of negotiation analysis, where the participants had to evaluate their own and their partner's behavior and the negotiation process. This work led directly to the next phase.

Phase VII *Conceptualization* involved writing a report that tested the ability to analyze negotiations using theoretical concepts, as well as academic language and academic conventions. It was an open book assignment. The students were given guidelines and encouraged to use materials introduced over the duration of the course.

The independent research project was the same as in the TBL section.

3.1.4. Comparison of TBL and EBL instructional models

The preparation phase was the same in both courses (see Figs. 1 and 2), and so was the general flow of activities from theory to practice.

In both courses, readings from literature in their respective fields were used to build a knowledge base and provide language input that was necessary for analyzing cases and completing assignments. The activities were designed around content tasks that build on each other allowing learners to accumulate knowledge and develop academic language. In both courses, the format of tasks and activities based on course readings was the same or similar. So too were the major assignments, including the final report and the independent research project.

Both themes span over a variety of academic disciplines, and thus were considered relevant to the diverse EAP student population. Furthermore, the themes tapped into the students' background knowledge as everybody has experience with innovations and everybody has a negotiating experience. Research shows that background knowledge or schemata learned in the first language helps learners understand texts in the second language. Moreover, background knowledge has been shown to give confidence and contribute to active participation in class (Carrell, Devine, & Eskey, 1988; Carrell & Eisterhold, 1983).

The difference in the learning experience between the two courses occurred after the second phase, i.e., theoretical foundations. In the TBL course, the tasks continued to be designed in the format of the sustained-content model. The students were given cases to read, discussed them with the classmates, worked in groups, created diagrams, and provided an assessment of how and why each innovation diffused successfully. The final report – the conceptualization phase, was based on a new case: a reading on the history of the radio.

In the EBL course, the analytical skills were practiced using the sustained-content experiential learning model, characterised by learning by doing and reflection. In Part 1 of the hands-on experience phase, the students engaged in face-to-face negotiation role-plays conducted in teams of three. They read case descriptions, discussed them, decided on the strategy and bargained with the counterparts' team. Then they wrote a reflection in which they commented on the process and outcomes. Part 2 of the hands-on experience phase involved online negotiations. It was a bilateral, anonymous, asynchronous negotiation supported by the negotiation system's analytical tools. Throughout the negotiation, the students kept a negotiation journal in which they reflected on their own and their counterpart's behaviour and strategies, on their reactions to what was happening, their expectations, etc. When the negotiations ended, the students filled in a short questionnaire in which they evaluated their negotiation: a guided reflection. The final report was based on this personal experience.

4. LEARNING BY DOING WITH AN ONLINE NEGOTIATION SUPPORT SYSTEM

As mentioned earlier, online analytical and knowledge-based systems that support collaboration can be successfully incorporated into ESP/EAP courses at the tertiary level of language instruction. Such systems provide opportunities for students to engage in meaningful interaction based on joint problem solving and learning by doing. One of these systems, Inspire, was used in the EBL course.

4.1. Inspire - an online negotiation support system

Inspire system was developed at Concordia University, Montreal, Canada, and used to give business students hands-on experience negotiating with business students in different countries. The system accepts requests from instructors of other than business courses. Following a request from the author of the paper, the EBL students were registered to participate in international negotiations. They negotiated with business students in three universities, i.e., the University of Vienna, Vienna, Austria, the University of Economics, Katowice, Poland and National Taipei University of Business, Taipei, Taiwan. In other words, all the participants were non-native speakers of English.

The Inspire negotiations fit the EBL course theme *decision making and negotiations*. Having EAP students participate in the negotiations created an opportunity to enhance the course delivery by providing a unique experience of communicating with students located in three countries. The system allowed the participants not only to communicate with their counterparts to resolve their differences, but also provided tools that encouraged the students to analyse and reflect on their and their counterparts' actions at every phase of the negotiation.

4.1.1. The case

The case that was assigned by the Inspire team was a contract negotiation between an agent representing a singer and song writer, and a manager representing an entertainment agency. The Inspire team matched the students in these one-on-one negotiations and provided a detailed description of the role that they were going to play: an agent called Fado, who represented Ms. Sonata, a young songwriter and singer, or a manager of an entertainment agency (WorldMusic Inc.), called Mosico. Both parties were interested in signing the contract, but there were differences in their contractual preferences (explained in their role descriptions). In order to resolve their differences, they had to engage in negotiations. The purpose of the negotiation was to agree on the terms of the contract that would be acceptable to both parties.

The negotiation focussed on four issues that the agents needed to agree on: (1) the number of concerts per year; (2) the number of songs per year; (3) royalties; and (4) the signing bonus. Within each issue there were between three and four options (e.g., for issue "No. of concerts" the options were five, six, seven and eight concerts per year).

4.1.2. The negotiation process

Inspire negotiations are based on the three-phase model of negotiations, i.e., preparation, conduct of the negotiation, and post-negotiation. In the preparation phase the participants are asked to read an example of online negotiations, watch a demo, and acquaint themselves with the system. They subsequently read the case which introduces both sides of the negotiation and describes the preferences of the party they represent.

The preferences of the principals (Ms. Sonata and WorldMusic Inc.) are presented both verbally and in the form of a bar graph. Fig. 3 shows Ms. Sonata's preferences for the four issues. The explanations and the bar-graph that Fado sees indicate that the most important issue for Ms. Sonata is the number of promotional concerts (she does not want to perform many concerts) and the number of songs; royalties and the signing bonus are less important. Four options of the issue "No. of promotional concerts" are also shown in

Fig. 3. For WorldMusic, the number of promotional concerts and the number of songs are also most important, but they want Ms. Sonata to perform the maximum number of concerts. Options for the other issues are shown in a similar form.

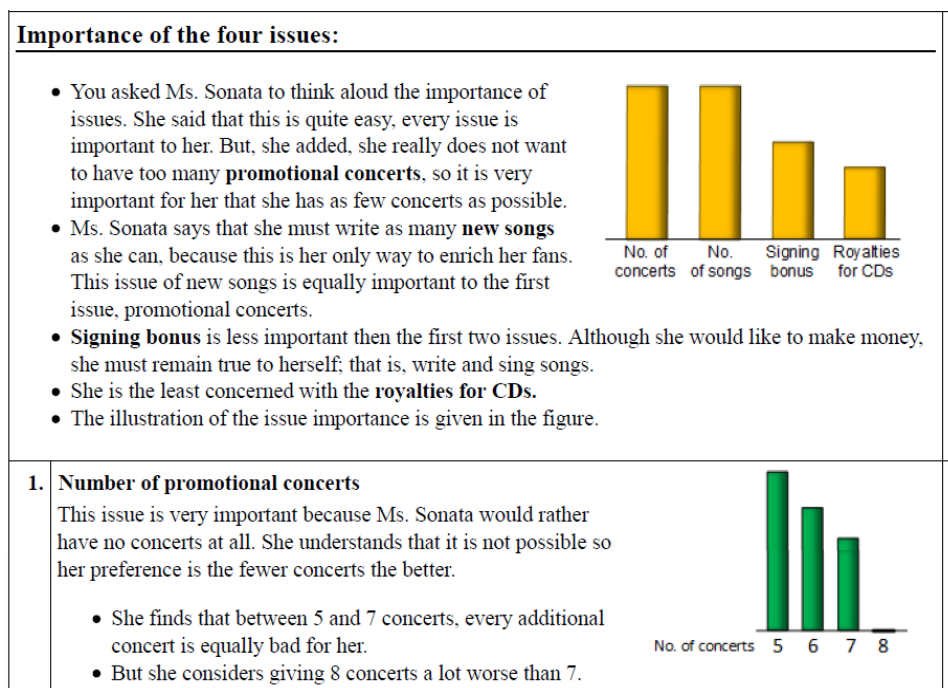


Fig. 3 Importance of the four issues for Ms. Sonata

The preparation phase was done in-class to address any problems that might arise due to the fact that the negotiations were a new learning experience for the EAP students. First, they became acquainted with the system (demo, example), the case, their role in the negotiations and their role description. Then they rated issues and options, keeping in mind the preferences of the party they represented (Fig. 3). When making these decisions they engaged cognitive skills (learning and problem solving), they weighed what combination of issue options would bring the best results and considered which issues they might be willing to soften their position on. Moving through the preparatory tasks, the participants were immersed in rich negotiation environment with language input. They had to understand every step of the preparation process and follow instructions. (Not following instructions, a fairly common weakness, is not possible in Inspire). If a student had a problem understanding, then they could check the glossary or FAQ. Throughout this phase, the participants engaged in meaningful interaction with the system before they interacted with their counterparts.

During the conduct of the negotiation, the counterparts exchanged offers and messages. When one side submitted an offer, the other side received an automatic email notification.

Fig. 4 illustrates the beginning of the negotiation phase. Fado received the initial offer from Mosico; this offer rated only 40 (out of 100) for him. Using the information displayed on the screen Fado had to decide what counteroffer to send and what to write in the message to keep working with the counterpart on joint problem solving.

The screenshot shows the 'mspire' negotiation system interface. At the top, there are navigation tabs for 'Main', 'Status', and 'Help', and a timer indicating '5 day(s) and 9 hour(s) are left.' The main content area is titled 'Read last offer' and contains the following text:

Your counterpart has made an offer, which you may now review. If your counterpart's offer seems satisfactory, you may choose to accept it. Otherwise you can make a counter-offer or send a message.

Any newer messages that were unaccompanied by offers are not displayed above. You need to select *View History* to see the full history of offers and messages to examine the recent activity.

Note: In order to accept this offer, you should come back to this page by clicking *Read offer* button

Mosico's latest offer: 2008-02-23 13:46:03 (GMT)

Issue	Option
Number of promotional concerts (per year)	8
Number of new songs	14
Royalties for the CDs (% of revenue)	2.0
Contract signing bonus (\$)	125000

Below the table, there is a text input field for 'Your rating of this offer:' with the value '40' entered.

On the right side of the offer, there is a text box containing the message: 'Hallo Fado, It is really my pleasure to negotiate with you - a brilliant'.

At the bottom of the offer section, there are instructions: 'If you wish to make a counter-offer to this offer, please click "Send offer" button in the right column.' and 'If you wish to accept this offer, please click "Accept" button below.' Below these instructions is an 'Accept' button.

On the far right, there is a sidebar with several sections: 'NEGOTIATION' (containing links for General information, Private information, Issue ratings, Option ratings, Package ratings, Send message, Send offer, Read last offer, and View history), 'CONTROL' (containing Refresh, Log out, and End negotiation), and 'SYSTEM MESSAGES' (containing a yellow box with the message 'You received one or more offers.').

Fig. 4 An example of offers and counteroffers exchanges

Fig. 5 illustrates engagement in a meaningful communication aimed at providing arguments to justify one's own offers and at persuading the counterpart to make concessions. The transcript was very useful, not only during the conduct of negotiations but also for writing the final report.

The negotiation ends when an agreement is reached, one side terminates the negotiation, or when the time runs out.

In the post-negotiation phase, the system may suggest a better solution for both parties, and they may decide to accept it. Finally, the participants are asked to respond to the post-negotiation questionnaire regarding their negotiation experience, which prompts final reflection.

Fado's offer: 2008-02-23 15:56:43(GMT)

Issue	Option
Number of promotional concerts (per year)	7
Number of new songs	14
Royalties for the CDs (%of revenue)	3.0
Contract signing bonus (\$)	150000

After a big argument we realize that we can agree for the number of of concerts only if you compensate all the physical and psychological inconveniences that it cause. You can do it by rising the percentage of royalties up to 3% .

Your rating of this offer:

Mosico's(your) offer: 2008-02-23 15:45:08(GMT)

Issue	Option
Number of promotional concerts (per year)	7
Number of new songs	14
Royalties for the CDs (%of revenue)	2.5
Contract signing bonus (\$)	150000

We allway make concessions to peapol worth of them. Even though we have already agreed 8 concerts with the extremenal sponsors, we decided to call off one of them. But note, I had to use all my interpersonal skills to convince my board to accept it .

Your rating of this offer:

Fado's offer: 2008-02-23 15:37:21(GMT)

Issue	Option
Number of promotional concerts (per year)	6
Number of new songs	14
Royalties for the CDs (%of revenue)	3.0
Contract signing bonus (\$)	150000

We do appreciate the increase for the amount of the contract . But please understand, making 8 concerts per year is extremally exhausting task. After one month of tournee we need al least one more of holiday. We need time for writing and recoring songs too. It is a big concession from Ms. Sonata to

Your rating of this offer:

Fig. 5 An example of the history of offers and message exchanges

4.1.3. Online negotiations and experiential learning

A closer look at the Inspire negotiation phases shows that they resemble those of the experiential learning cycle. In the preparation phase the participants perform a variety of tasks that prepare them for negotiations. The conduct of negotiations corresponds to concrete personal experience, and the post-negotiation phase, to reflective observation.

In terms of active experimentation, conclusions cannot be formulated with any degree of certainty. However, students' responses to a short questionnaire showed that 81% would use the negotiation skills learned in the course in real life. More importantly for pedagogical purposes, however, the final reports indicate that the students acquired academic language and critical thinking skills that they will be able to transfer to other courses.

5. RESULTS AND DATA ANALYSIS

This section compares and analyses grades obtained by the students in the two courses.

5.1. Participants

All participants who were the subject of this study were EAP students enrolled in advanced level courses of the EAP Program at Carleton University. Approximately half of the participants were enrolled in the TBL course, and the other half in the EBL course.

For the purpose of this study, the number of students in two concurrently running TBL course sections were combined. Likewise, the number of students in two concurrently running EBL course sections were also combined. Students who missed one or more in-class assignments were removed from the sample. As a result, the TBL sample comprised 32 students, and the EBL sample had 35 students

The students in both courses came from similar cultural, linguistic and educational backgrounds – the TBL course had 11 Arabic speakers, 13 Chinese speakers and 8 speakers of other languages; the EBL course had 11 Arabic speakers, 17 Chinese speakers and 7 speakers of other languages. Most were in their early 20s.

5.2. Comparison of the grades

Students in both the TBL and EBL courses wrote seven assignments. Four assignments were written in class: a vocabulary test; a critique analysis; a short answer test; and a report/case analysis. Three assignments were written as homework: the diagnostic test, the independent research project, and the negotiation journal. For the purpose of this study, only the assignments written in class were taken into consideration.

The vocabulary test assessed the use of reporting verbs in context as well as citations in APA style. The critique analysis focused on analysing the content and the language of a book review. The students were asked to identify the purpose of each and to make a list of positive and negative comments used by the author of the review. The short answer test was an open book test based on a book chapter; in the TBL course a chapter on *innovation diffusion* was used, and in the EBL course, a chapter on *decision making and negotiations* was assigned. These were not new readings; they had been discussed in class for three weeks. The students had to locate answers to five questions and provide 150-200 words answer to each question by paraphrasing/summarizing information from the text and citing the source. The report/case analysis in the TBL course was based on an encyclopedia entry on the history of the radio. Using Rogers' diffusion of innovations theory, the students had to analyse the stages of the radio diffusion and write a report. The report/case analysis in the EBL course was the analysis of the students' experience with online negotiations for which they applied the concepts of negotiation analysis introduced in the course. The short answer test and the report/case analysis were graded on content, organization, language (range and accuracy) and academic conventions.

5.3. The statistical analysis of the grades

First, the mean grades obtained by the students in each course prior to the final report were calculated and compared. The mean grade in the TBL course was 67%, and in the EBL course 70.2%. These mean grades do not include the grades obtained for the final

report. To determine the contribution of the report, the difference between the percentage of the total grade that was obtained prior to the report and the percentage of the total grade that the students obtained after the final report, were compared. This value represents the difference in the learning gains in the two groups.

If, for example, a student's average in the course prior to the final report, was 70% (she obtained 21.25% out of 30% of the total), and if for the final report she received 80% (the report was worth 20% of the course total and she received 16%), this raised her average grade to 76.2%, and her standing improved by 6.25%.

The distribution of the students' grades is shown in Fig. 6. In the TBL course, 15 students (46%) improved their standing after writing the report, while 17 students' standing (52%) worsened. In the EBL course 33 students (94%) improved their standing and only 2 students' standing worsened. This suggests that experiential learning had stronger positive impact on the final results than text-based learning.

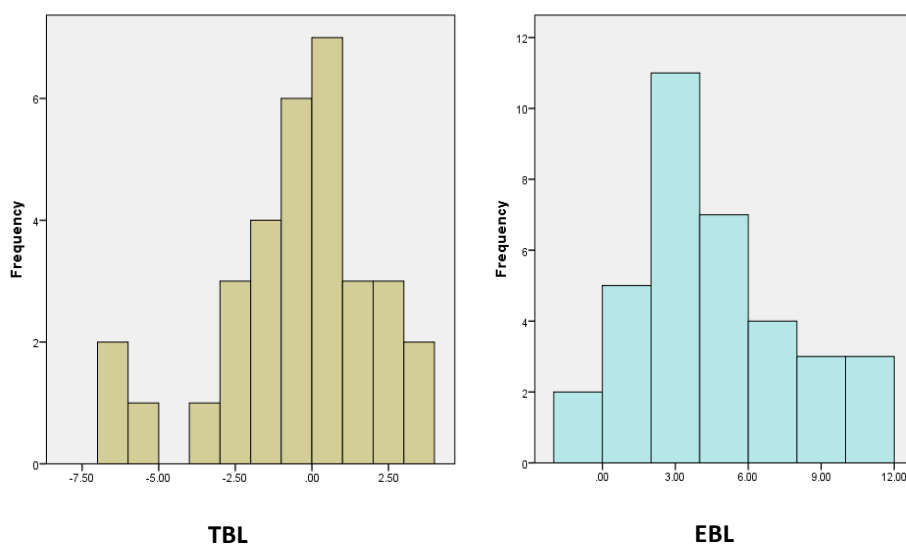


Fig. 6 Histograms of relative grade difference for the TBL course and the EBL course

5.4. Analysis

There are more than 25 data points in each sample (32 for TBL and 35 for EBL). The mean and standard deviation for the TBL and EBL groups is, respectively, 0.62 and 2.48, and 4.34 and 3.13.

Given the above and the fact that both groups may be considered as two independent samples drawn from the student population, a *t*-test for independent samples was used to verify the hypothesis. From the Levene's test for equality of variances, a *p*-value = 0.094 was obtained, which is greater than the typically assumed α level of 0.05. Therefore, the null hypothesis that the variability of the two groups is equal is not rejected and the assumption of the *t*-test has been met. The result of the *t*-test indicates that the means

from the two samples are significantly different ($p \leq 0.001$); the mean difference is 4.96 with standard deviation of 0.69 - an average grade increase of almost 5%.

The difference between the p -value and the α level (0.094 vs. 0.05) may be considered small. Therefore, a t -test where variances are not assumed to be equal may be more appropriate. The p -value and the mean and variance values are, however, identical for equal and not equal variance values. Furthermore, running a non-parametric Mann-Whitney test for independent samples, which does not require normal distribution and large samples, also confirmed the hypothesis ($p \leq 0.0001$).

The statistical analysis of the grades confirms the hypothesis that sustained-content instruction enhanced by experiential learning results in better learning outcomes than learning based primarily on input from texts.

6. DISCUSSION

The comparison of the learning outcomes in the two courses was based on the final report's contribution to the students' grades. In both cases, the students were given instructions on how to write a formal report. In the introduction, they explained specific concepts related to the theory presented in the first half of the course, then they described the case, analyzed the case (TBL course) or online negotiation experience (EBL course) using the new concepts. It was an open book assignment and learners were expected to use all resources introduced during the course. The reports were evaluated on content, (including critical thinking), language and academic conventions.

Typically, the grades for the final report do not significantly improve students' standing. This was the case with the TBL group where only fifteen out of 32 students received slightly higher grades that improved their standing. In contrast, 33 students out of 35 in the EBL group received higher grades and improved their standing. Furthermore, the grades for the report obtained by the EBL group were unusually high, and this prompted the instructor to ask the students informally why they had done so well. They gave two reasons, one that the report was based on real experience and the other that they did a lot of writing in the course. Since both sections did the same amount and types of writing, the first reason is worth discussing as it raises the question of the benefits of experiential learning, in this case, with the help of a web-based negotiation support system.

6.1. Motivation, involvement, and learning

The significantly better learning outcomes in the EBL course than in the TBL course suggest that analysing a personal experience is a more effective learning strategy than analysing cases described in textbooks.

Role-playing activities, both in language and in negotiation courses, have been credited with increasing intrinsic motivation. Shinde and Shinde (Shinde & Shinde, 2022) state that role-plays develop such skills as "initiative, communication, problem-solving, self-awareness and working cooperatively" (p.5). A body of research on role-playing simulations in negotiation courses shows that carefully planned role-plays get students engaged "behaviourally, cognitively and emotionally" (Poitras, Stimec, & Hill, 2013). The negotiation journal entries testify to the fact that the majority of students carefully analyzed their counterpart's offers with the help of the system and carefully planned their responses. The entries show that many were troubled when they did not receive a

response within a day, and when the counteroffer was not to their liking they were genuinely upset, annoyed or even angry. Below are a few excerpts from a negotiation journal: *What is he thinking? This is the worst offer I have received so far; After two days of waiting... I was so worried... It's pretty stressful and I felt anxious waiting for the message; I will wait until tomorrow to think; It took me about two days to reach a decision regarding the offer that Mr. Mosico sent me* (language edited by MK).

Another factor that may have contributed to higher grades on the final report in the EBL course could have not only been the interaction with the counterpart, but also the interaction with the system and its decision aids over an extended period of time. While negotiating, the students were immersed in a rich content and language input, which created conditions for natural language acquisition (Krashen, 1987). The asynchronous aspect of the Inspire negotiations gave learners “extended time and opportunity to react, respond, and interact with material and each other” (Jaffee, 1998) and reflect, and thus created conditions for both language acquisition and language learning.

6.2. Student autonomy

Giving students autonomy through assignments such as project work and reflection is important because the skills that they acquire prepare them for life-long education (Gocić & Jankovic, 2022).

The students in the EBL course had full responsibility for conducting online negotiations, without the teacher supervising their activities. However, as documented in relevant academic literature, a methodology that emphasizes learners' control over the learning process and outcomes can be a challenge for both students and teachers. Knutson (2003) provides examples of criticism of experiential learning in the second language classroom. Some educators question the practicality of the projects. Others refer to classroom time constraints, and challenges with creating a comfortable and relaxed yet learning conducive atmosphere. Still others point out difficulties with assessing the outcomes. Experiential learning projects have also been criticized for being frivolous and poorly controlled, particularly when it comes to the use of mother tongue.

The Inspire system, which has been designed to train students and professionals in the art of negotiating, is rigorously structured. Nevertheless, it is very easy to use, and it gives its users full autonomy over the process. The teacher is “invisible” to the students as the system takes over practically all of the responsibilities for the running of the project. All materials are available online and the Inspire team matches the students, assigns roles and monitors interactions. Users are notified by email when their counterpart sends them an offer or a counteroffer. If they procrastinate, they are reminded by the Inspire system to respond. The negotiations take place outside of the classroom, so there are no classroom time constraints. The negotiations are anonymous and asynchronous, thereby removing the element of playing it “safe” often present in classmate-to-classmate negotiations. As far as creating a comfortable atmosphere is concerned, the student can choose the best time to respond and take as much time as he or she needs to formulate offers and messages. Finally, there is no need to control the use of mother tongue, as it simply cannot happen in these anonymous international negotiations, for which an English website is used. In terms of assessment, a variety of assignments can be given (e.g., a negotiation journal, a reflection on the process and outcomes, an assessment of technologies used, and a report).

All of this being said, the process was not without glitches. A few students forgot their password and could not access the site; a few were checking a wrong mailbox. In the first two days of negotiations, about 20% of students had to be reminded by the system to negotiate because their counterparts were getting anxious; one student had an unresponsive counterpart but did not notify the Inspire group for three days. However, these were minor problems, and an important part of learning how to use technology.

7. CONCLUSIONS

This study reported on a successful adoption of a negotiation support system to an EAP course and the learning benefits of direct experience. The paper also attempted to show that this teaching and training system has strong similarities to experiential learning models used in the second language classroom. It further explained that it does not only fit the ESP/EAP content-based instructional models, but it also enhances learning by promoting learner autonomy, critical thinking and academic language development. The participation in online negotiations required that the learners take full responsibility for the process and the outcomes. The focus of the negotiations was to resolve differences between the two negotiating parties. While negotiating, the participants showed emotional and cognitive involvement which made the experience both meaningful and authentic. Furthermore, the asynchronous aspect of the negotiation and the fact that the participants had access to the records of their communication, encouraged reflection. All these aspects of the experiential learning project led to enhanced learning outcomes thus supporting the claim that learning by doing benefits language acquisition.

The study has some limitations. One limitation is the use of different themes in each group. It is possible that the topic of innovation diffusion was less interesting or more difficult for the students than the topic of decision making and negotiations. A comparison of the learning outcomes of TBL and EBL groups both working on the theme of decision-making and negotiations could verify our results. Another limitation is the sample size – 32 and 35 are small samples. To verify the results a larger sample and more student groups could be analysed in the future.

Despite its limitations, the study showed the potential of incorporating web-based systems that support experiential learning for teaching EAP and ESP. The presented model depicts the importance of sequencing academic content tasks that build on each other allowing learners to accumulate knowledge and language and prepare them to engage in a meaningful, authentic communication. It also showed the importance of using reflection as an effective learning tool that helps develop critical thinking and analysis, skills necessary for academic success.

*Please note that the service offered by the INSPIRE team was disrupted by a sudden death of the system's creator Prof. Gregory Kersten. However, a new negotiation system based on INSPIRE, i.e., eNego is available at web.ue.katowice.pl/enego/.

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Review research paper

CROSS CULTURAL COMMUNICATIVE CHALLENGES IN EAST INDIAN CLASSROOM

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Abstract. *Business Communication Teaching in India has its roots in English for Specific/Special Purposes or English for Technical Purposes (ESP/ETP) and its end products feed the recruitment markets worldwide. One assumes a certain degree of homogeneity in terms of industry-ask. A communication classroom is also perceived as having a minimum commonality of goals, competence and curriculum, the world over. What is intangibly heterogeneous, however, is the personal schema of individuals involved, and the complexity therein. Teachers and students of an Indian classroom bring with them their varied cultural contexts. While this definitely contributes to a great amount of healthy diversity of content, both the explicit as well as the implicit, this also creates challenges. Identifying patterns of communicative dissonance in cultural contexts in India and managing those communicative conflicts that arise therefrom, is the purpose of this discourse.*

Key words: *cross-cultural, communicative, challenges, patriarchy, deference, tradition, subservience, gender disparity*

1. INTRODUCTION

We all have an internal list of those we still don't understand, let alone appreciate. We all have biases, even prejudices, toward specific groups. In our workshops we ask people to gather in pairs and think about their hopes and fears in relating to people of a group different from their own. Fears usually include being judged, miscommunication, and patronizing or hurting others unintentionally; hopes are usually the possibility of dialogue, learning something new, developing friendships, and understanding different points of view. After doing this activity hundreds of times, I'm always amazed how similar the lists are. At any moment that we're dealing with people different from ourselves, the likelihood is that they carry a similar list of hopes and fears in their back pocket.

-- *Waging Peace in Our Schools,*
Linda Lantieri and Janet Patti (Beacon Press, 1996)

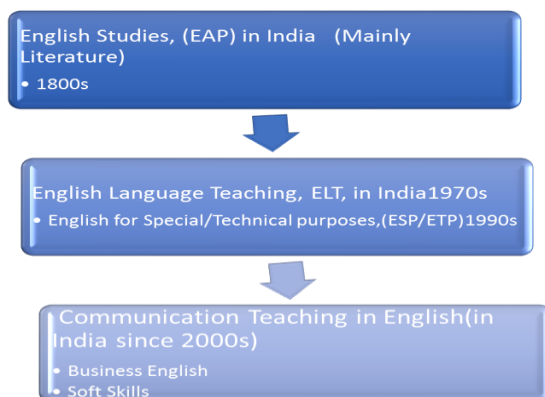
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Before one attempts to assess the cross cultural communicative challenges in East Indian classrooms, one must focus very briefly on the context, i.e. teaching Communication in India and its pedagogical requirements. English Language Teaching came to India when the country felt the need to augment the communicative competence of users through a focus on linguistic skills development. With the end goal being that of employability and deployability, professional programs offered by institutions adopted this element of competence augmentation fairly rapidly. This led to the genesis of a new chapter in English Teaching in India and a new avatar of English (ESP/ETP) was born.

Diagrammatically, the genealogical process of Communication Teaching may be represented thus:



1.1. Methodology

The methodology of this research content is both primary as well as secondary. The backstory of Communicative English/Business Communication Teaching has been gathered from written resources like books and internet sources, cited in the References.

The cross-cultural communicative challenges faced are from lived and shared experiences of teacher- researchers like oneself. Credit is given wherever due.

1.2. Literature Survey

Heather Bowe and Kylie Martin (Communication Across Cultures, 2007) define ‘culture’ to connote multifarious ideas. Preferred most for use here is that which refers to knowledge, belief, art, morals, law, custom and other capabilities and habits acquired by man as a member of a society. When Bowe and Martin co-authored their book, linguistics was foremost in their minds. People invariably bring the socio-cultural expectations of language into their communication. While certain countries (North America and Germany) are low context cultures, man Eastern and South Eastern countries are high context cultures, where face, context, frames of reference take precedence over the communication content. Aggression and assertiveness in language of communication is also seen to be associated with fatherlands, like in the West whereas Eastern communication is more biased towards negotiation, persuasion, etc. Motherlands across the world are prone to more politeness markers and bottom-up communication styles. Dr Geert Hofstede proposes

5 independent dimensions of national cultural differences that can be highlighted as markers of cross cultural communicative dissonances. They are:

- Power Distance Indicators
- Uncertainty/Ambiguity Avoidance
- Individualism Vs Collectivism
- Masculinity Vs Femininity
- Short Term Vs Long Term orientation

Brown and Levinson (1987:77) define 'power' as follows

P (Power) is an asymmetric social dimension of relative power roughly, in Weber's sense. That is, P is the degree to which H (Hearer) can impose his/her own plans and self-evaluation (face) at the expense of the S (Speaker's) plans and self-evaluation.' Another concern in cross cultural communication is the problem of stereotyping (Scollon & Scollon, 2001). This is often born out of the belief that two cultures are usually polar opposites, while in truth, there are enough areas of homogeneity which co-exists therein.

It will be pertinent to mention here once again, that since Communication Teaching has been in effect in India, only since the late 1990s and early 2000s, it has very little recorded literature to learn or derive from. Hence, the bibliography reflects that.

Pedagogic traces of Business Communication/Communication/Communicative English teaching in India have been accessed from the stories of India's colonial past, and the progression from EAP to ETP.

Pedagogic traces of Communicative English Teaching have been based on the seminal works of researchers like Ellis and -Johnson, Tony Wright, Penny Ur, Richards and Rodgers.

It is important to understand the common ground Communication Teaching in India has, with that of Communication Teaching practiced in the world.

However, the crucial resource for this discourse is one's teaching experiences in real time. Teaching Communication in class, woke one to the fact that, the same word, endearment, or 'ask' in class, connotes differently to different students based on their cultural schema. While one would typically slot an 'Indian' class as 'Indian', there is little commonality therein. Different states, different geographies contributed to their own mini-Indian ness of which one rarely took notice. Therefore, this discourse is based as much on one's own experiences as it is on others' writing of their studies on this issue.

3. DISCUSSION

In Working on Cross Cultural Communication, Marcelle du Praw and Marya Axner (AMPU Guide: Common Cross Cultural....) suggests that there are 6 different communication aspects that s contribute to cross cultural communicative challenges.

- *Different connotations of the same phrase*

A 'yes' is a 'I will consider it' or a 'definitely'

A 'let me see' is a 'I don't think so' or a 'not at all', never a really 'let me see' open ended situation.

Non-verbal cues arise also out of seating. There is a definite power play in the seating of persons who interact with each other. Seated opposite each other are those that are clearly in a powerful/powerless situation relative to each other. Seated laterally, on the other hand denotes nearly equal power between persons.

- *Cross cultural communicative differences also arise from different connotations of 'time' among people.*

To be 'on time', a general hallmark of punctual persons connotes as 'eager to negotiate and willing to accommodate'. To be considerably 'late' is seen as a mark of 'power and importance'. If people are waiting for a person, usually that person is very important.

- 'Raised voices' have different connotations for different people. In some countries outside India, raised voices are markers of anger and conflict. In India, Italy, Latin Americas, raised voices connote a sense of familiarity, familiarity, and freedom of expression.

- *Conflict* is also perceived differently among cultures. Indians accept conflict as par for course. However, there is a catch in the context wherein the elder is also often unequivocally obeyed. This is particularly true of an intergenerational family, a society etc. Corporate India is striving to be a meritocracy. This is often against the values that are traditionally ingrained. Age, experience lends itself to a 'merit' that cannot be earned via education or material successes. Also, in India there is no distance between the person and her/his thought/views. One having an unacceptable view becomes unacceptable. There is no 'I do not agree with your views'. It is 'I do not agree with you'.

The Western way of dealing with conflict is by confronting it directly. Sitting across each other and working out the issues. In India one tries to shelve issues for as long as they can be shelved. This is in the hope that it will go away on its own. Some do. When conflicts do not resolve themselves with time in India, there is formed a panel of resolvers that congregate and democratically address issues. An important area of difference that needs to be highlighted in this regard is that the written word, emails, etc are not considered the first line of conflict resolution in India, unless persons are geographies apart. The first line of conflict resolution in India is to meet and talk about it face to face. The alternative is to talk over telephone. The last favoured alternative in India is to email. In fact, an email is considered by many in India as an escalation. This is in sharp contrast to the Western approach to conflict resolution, which is an email. Even if one is sitting at the very next workstation.

- *Perception of task accomplishment varies from culture to culture:*

India, Pakistan etc countries view Task Accomplishment as an opportunity for Team Building. The task is actually an opportunity to perform teamwork, build relationships and move together with a shared purpose. The team functions like a family, with elders often protecting younger persons, regardless of team roles. Not offending anyone or hurting sentiments, understanding each-others' constraints in life often are equally, if not more, crucial. It is safe to say that the focus on the 'task' is diluted. Contrasted is a Japanese, Western approach to Task Accomplishment. The task is broken down to discrete components. Roles are assigned depending on competence, Timelines are assigned as well. There is monitoring to see that the job gets done within deadline with effectiveness and precision. In task accomplishment, the task should be and is, the focus the world over. In India, sometimes, it is not. The 'people' are more important than the 'purpose'.

- *Decision making styles differ from one culture to the next.*

Delegation of Roles is important in western cultures. In India it is not always the norm. Power and information is rarely democratically available. It is considered the privilege of a few. Even when there is an attempt to garner consensus, it often remains a token action

in the long term. Though there is a sense of democracy in government, the Indian people are often not privy to the whole truth to base their decisions upon. This is often a serious breach of transparency which is the very plinth of democratic processes. The Indian organizational, educational institutions included, are almost feudal in their percolation of power and delegation of it leading to decision making. Even Indian families see fit to remain 'guardians' of their much-married children and their children.

- *Differing perspectives to disclosure:*

Sharing information about oneself, specifically, sharing feelings, is considered very common place in India. This, however, is not the case in the western world. Reticence about being emotionally vulnerable is a common trait among many westerners, some East Asians, definitely the Germanics. The gender roles come into play here forcefully. Privacy concerns are misplaced in India where one can use a roadside patch of green to relieve themselves in the broad daylight, but will not speak about sex or problems associated with it, even behind closed doors and to a doctor. Sharing mental agony is largely unheard of until one attempts to hurt oneself from unbearable pain. Depression, Psychosis, and other such illnesses are often termed 'madness' by Indian conservatives and a stigma that is best avoided. Indians are big on judgements, not on feedback regarding them. There is very little one does by way of an 'exit' interview, in any situation.

- *Attitude to materialism, spiritualism and other such core values:*

While ancient India and Japan, along with other East Asian countries were once the 'gurus' of monasticism, spiritualism and collectivism, modern times are democratically promoting the lure of the lucre. Nirvana and transcendence is not the goal of life for most modern netizens, temporal goals of success are.

A TED X Talk at Bergen by Pellegrino Riccardi, translated by Ilze Garda, (<https://youtu.be/YMyofREc5Jk> , accessed on 11th Sep2022) focusses on 'perception' as the key to cross cultural communication. He makes it clear that one's accent plays an integral role in how one is perceived in terms of value. Hence, a vernacular or L1 influence, or residue in one's spoken English, or any other global language, leads the audience to deduce a lack of erudition or sophistication.

Riccardi's experiences lead him to deduce, correctly, that 'distance or space' is also a culture marker. In many countries, ques have people standing chest to back in front of each other, like in India. Others find it decent to stand a foot or more apart. One is used to an entire family fitting into a one-bedroom tenement in rural or semi urban India. Hence, proximity is not a problem. Not so for the urban elite. In Western countries, even the impoverished require more space to themselves. It is a very traditional inherited sense of space that cultures imbibe. Riccardi also highlights the use of words in a message. There are cultures like the British, Indians, who are more loquacious. More words but little message is the outcome. The reverse is also true. There are cultures like the Germanic culture, (countries speaking German as a first or second language) that are sparse with their language- being often monosyllabic in their response that sufficiently convey their message however, comprehensively. Riccardi describes this as 'minimum words' -(eliciting)- 'maximum message'. A humorous take on 'rules' by Riccardi pronounces rules to mean infallible in some cultures, like in the Western world, and just a very broad set of ideas to work with, in some other cultures, for instance, in India and Latin Americas. In the latter countries, ingenuity is often admired as the 'rules' are legally flouted.

This background information is relevant in the context of analyzing a Communication class in India wherein most of these cultural challenges play out in course of one's classroom interactions. However, one must clarify at the outset that a transmission type knowledge sharing class on a curricular subject like theory classes on the social sciences are not similar to the format of a Communication/Business English Communication class. In the latter, the skills inculcated are more important than the theoretical knowledge of the skills. Communication/Communicative English Classes in India depend to a great extent on the planning and management of classes. This is because there are a whole range of variables that operate in these classes that need to be taken into consideration, almost simultaneously.

Based on this context, one could classify a Communication class in India as being a straightforward exercise in knowledge sharing and skill development. However, cultural heterogeneity in the classrooms contributes to challenges that feature, while getting the message across. Communication is intrinsically dependent on context.

The urban elite are almost always understanding of 'context' and is able to adapt. The rural or semi urban Indian learner is not. There is a robust mix of both kinds of learners in a typical East Indian classroom.

2.1. Some of the oft visualized scenarios in a communication class (comprising a larger number of non-city learners) are that

- *Girls and boys occupy two sides of the class.*

The extrinsically motivated learner of a professional course, present in class to be taught communication skills, has been undoubtedly brought up to consider themselves as different from and wary of, the other gender. Even in the binary, another gender causes psychological problems. Traditional homes in semi urban to non-urban India rear their girls away from the male gaze. It is very difficult for these learners to embrace the concept of colleagues, teammates, and friends. Our films too, have played into the Indian psyche with the notion of 'friendship is love' and vice-versa. (Film - 'Kuch kuch hota hai' -Karan Johar) To get these learners to disregard their parental forbidding and sit with, work with, talk with the other gender is a cultural challenge. This acclimation takes up a sizeable portion of the semester and valuable curricular content has to rush through, to make up time.

- *Pair activities do not elicit responses if the pair is heterogeneous in gender.*

It is assumed by most Indians that if a girl and a boy sit together then there is something special happening between them. It is most certainly not par for course. Even as we end 2022. In a typical class in college, there are more boys than girls in India. This is because the rate of girls' education still has a high dropout rate as soon as puberty arrives. The girls that do make it to the college classes post puberty have already been attuned to the traditional concepts of marriage where the girl is subordinate in power and intellect to whom she is 'given in marriage' to. This is what she has seen in her own house and what she has been told as truth. Same for boys. It is therefore assumed that in a pair communicative game/task, the boy takes the lead, is the more powerful, makes more decisions, while 'using' the girl as an accompaniment. The girl is happy to get the task out of the way. The boy has proven his worth in class. It is unthinkable for a mixed gender pair in Indian classrooms to instinctively ask each other which of the Interviewer-Interviewee roles they each would choose in a mock Personal Interview simulation. It is automatically assumed that the boy is the Interviewer/Boss/Manager etc. One has to categorically assign the power role to the girl in the pair. This too elicits protest and quite a lot

of mirth. Very rare are girls from cities who assume the power role themselves and excel in it. However, this change is achieved to a certain extent, by end of semester. Another aspect of interest is the lack of spontaneous eye-contact among boy learners and female teachers. The same is not a pattern for girl learners and their male teachers. Could it be because girls are attuned to looking up at men but boys are not so attuned? (to have lady teachers?) Inter gender eye contact is definitely a pain point at the start of a semester also because perhaps, at their homes, many of these semi urban/rural learners do not 'see their mother's/womenfolk's faces, covered as they are by the long length of their saree, called a 'ghoonghat'. This is supposed to protect the 'shame/lajja' or 'respect/izzat' of the woman in (some parts of Indian) society. Certain Eastern and Southern Indian states do not discriminate between genders in terms of head coverings.

If these young boys have never looked at their family's womenfolk, it is audacious to expect them to do so in class. Hence inter gender eye contact is a definite cultural communicative roadblock.

- *Role Plays become a tough ask as learners refuse to move beyond stereotypes*

In an activity called J.A.M. a learner is often required to enact a role for a minute. These roles, topics often take the learner out of their comfort zones. This is so that one is challenged to think and perform simultaneously without prior preparation. This open - ended activity is a one stop task that elicits and assesses communication, attitude, outside the box thinking, emotional quotient, intelligence et al. When boys get notes of paper with them being asked to enact Wonder Girl or a single mom, boys refuse to enact it saying, "I am not a girl, Madam. Please change the topic" It is unimaginable for them to even enact the role of the opposite gender for fear of being labelled/laughed at.

- *Leads are almost always taken by the male learner*

In most classes teaching Communication, activities and tasks take centre stage. In these, the lead roles are usually played by male learners. Female learners are usually happy to accompany and accommodate. It is only in the final year of the study program that learners learn to think of roles as merit/competence dependant and not gender.

- *The female learner is more often than not, reticent and too eager to accept/accommodate.*

Being accepting, absorbing and accommodating is celebrated as the virtue of ideal womanhood across the world. The stereotype of women, seen, not heard are no less true in India. However, this is a cultural and societal construct that working women are challenging the world over. The Indian classroom is not immune to this malaise. Girl learners are loathe to bargain, persuade, punish, push, decide, order and control. She is eager to accept and accommodate. Her pair activities with other learners commonly see her as buying/maintaining peace rather than strive to get her point across. However valid that might be. Second guessing choices, decisions and ideas are instinctive. Very rarely are these learners able to allow for their voice to be audible, let alone be heard. Their homes probably do not allow for it, in the name of 'sanskaar/ values' Deference to men and deference to the elder and compromising for the sake of the 'collective' is a virtue that is celebrated.

- *Knowledge of sport and politics is considered a male domain*

Girl students, mostly, refuse to speak on politics and sport, if given those as topics of Group Discussions, as these topics are considered male bastions by them. Even in the face

of a burgeoning population of Indian girls in sports, they are still considered ‘girls into sports’ to be differentiated from ‘normal’ girls who do not do these things. They dance, sing, paint and cook. And when it is time, look pretty, get married, keep home, rear family. This is still the subconscious Indian psychological construct. To coax them into gender neutral work roles, discussions or tasks, are a task in itself.

- *Challenging traditional concepts is avoided*

As a country driven by passions rather than intellectual purpose, there are too many areas that one is forbidden from discussing in the classroom, boardroom than realistic. Politics, religion, sex, freedoms, criticizing tradition, unedifying teachers, parents, acceptance of selfish goals, desires, fantasies, the list is endless. These are taboos that one does not discuss in any formal setting. These are non-existent. To teach topics encouraging inclusivity, empathy, as required by multinational corporates as part of their recruitment assessment tests, one requires to stimulate the learners metaphorically, to ‘boldly go where no one has ever gone before’.

- *Expressing oneself/information sharing is considered risky*

Trust issues are real and valid throughout India. In a country as hugely populated as it is, there is every reason to be fearful of lost opportunities, personal spaces and freedoms. Gender violence is real and is ingrained into one’s DNA from a very young age. Therefore a self-introduction in class may not elicit ‘truth, the whole truth and nothing but the truth.’ Another risk of sharing personal information is being stereotyped and judged by others for who or what one’s family is.

- *Individualism is shunned in favour of collectivism*

The relics of socialism still burn bright in India where joint families of intergenerational persons live together under one roof, feeding from the same kitchen. Hence, anyone who wishes to cut loose from this structure and think of one’s individual goals and desires, are castigated and labelled as selfish. It is almost a shame and a crime to look out for one’s own interests ahead of one’s family’s, organization’s, society’s. Any Role Play decision that is based on individual gains is something to hide, not flaunt. It is a pride to have failed together, rather than succeeded alone. (Haari jeeti naahi laaj, shobey mili kori kaaj)

- *Domains are clearly divided: inside the home-women, outside the home-men*

In an absence of role models at home, both boy as well as girl learners tend to attach more value to water-tight, uninterchangeable compartments of home and work. The former being the domain of the girls (even if working) and the latter, the boy’s (even if capable of housework). Responsibility sharing and equality is not something that has any real relevance. This is self-evident in course of communicative challenges, where even today, in 2022, recruiters ask a girl candidate to promise not to relocate upon marriage and quit the job. The boy student does not face this question. It is implied that it is the girl who will ‘accommodate’.

- *Dress*

There is increasing shrillness in India about appropriacy of attire. Both men, women, boys and girls are rethinking their choices of western formals in favour of what is being enforced as Indian. The saree, the shalwar etc are increasingly being depicted as favoured choices of Indian formals. Trousers, skirts and dresses are labelled as anti-national and anti-traditional. Girls and boys of an impressionable age are often fed stories on this kind of informal morality and appropriacy. Western wear is depicted as stereotypical of loose

morals and a leftover of colonization. The fact that working in western formal could be a choice is never suggested. Despite not having any one national dress, Indian learners almost always identify the saree as one. It is a different matter that this choice (the saree) is not at all conducive to all professions.

Conditioned thus, Indian communicative processes nearly stall in the presence of what is considered 'inappropriate attire'.

2.2. Management of the challenges

These challenges having been listed, the ways in which one could address them is the next part of the discussion.

Vocabulary Learning, an integral part of teaching Communication, may be achieved through Incidental Learning, where the task is different from the objective desired. That is, in role playing a conflict resolution, the obvious focus is on 'enacting the role' while the surrogate focus is learning chunks, or specific words, related to a similar real time situation. (Shakouri, Mahdavi, Mousavi & Pourteghali, 2014, p523) quoted in Deveci, Tanju. 'Internet Technology as an aid to Traditional Methods in the Development of Freshman Students' Use of Academic Words'. The Journal of Teaching English for Specific and Academic Purposes. Vol 5:1.2017. pp55-76 (2017).

- The class content may be used to work around the issues.
- The content may be modified to address these issues directly.
- These cross-cultural perspectives may be celebrated for their diversity and preserved as a choice.

In an increasingly complex workplace where learners are occupationally expected to function cohesively with teams belonging to different socio-political contexts, it is difficult, in the least, to preserve or celebrate, one's cultural and social prejudices (girl not wanting to communicate with boy and vice-versa). These situations in a communicative class take away time and focus from the communicative content and result in miscommunication. Allowing for patriarchal beliefs to persist in a class not only strengthens these beliefs, but also fails to prepare the learners for a real corporate role that ideally, has no place for gender discrimination or stereotypes. It is therefore the duty of the teacher to intelligently and gently guide the communication to focus on skills rather than gender, as the primary assessment point for all communicative tasks. This can be done subliminally or consciously. Experience sharing by colleagues have concluded that one does need to push the envelope when it comes to Discussion, J.A.M. topics and Role Plays, so that the learners can practice in a simulation what they are expected to do, in real life.

Thus, electing the girl as the boss in a boss-team member role play, or coaxing the girl learner to negotiate a tough deal, goes a long way in the learner unlearning traditional concepts and relearning the globally acceptable ideas of communication.

Some ideas used in the management of the listed and other cross cultural communication challenges may be the following:

Teaching learners

- not to assume
- not to stereotype
- to practice working with diversity
- to keep looking for the better way

- to listen
- to collaborate
- to know when to talk
- to what to say
- to pace and pause appropriately
- to have intonation mindfulness
- to be mindful of what is conventional
- to be mindful of the degree of directness to be practiced
- to practice cohesion and coherence
- to be mindful of greeting (touch/non-touch)
- to be mindful of language
- to give importance to values
- to be aware of education/elitist approach
- to be mindful of end goal (profit/value/relationship)
- to be aware of technology (enabler/disabler)
- to be mindful of use of emoji
- to be mindful with use of pronouns
- to be conscious of clarity Vs ambiguity of content

(Tannen, Deborah. Cross-cultural Communication. ERIC number ED253061, 1983 and Grammarly Business Blog Post, The ultimate guide to cross-cultural communication at work. Oct18, 2021.)

2.3. Unresolved Issues impacting Communicative Processes

The list of actions that may be taken in an attempt to dampen cross cultural conflicts in classrooms of Communication Teaching is exhaustive and easier achieved on paper. It is correctly said that one can take a person to a different land from one's place of origin but one can never take that land-of-origin out of the person. Culture is ingrained and subconscious. It is almost impossible to unlearn it and relearn something else.

The challenging concepts of gender roles and expectations are universally conventional. Cross-cultural communication only serves to bring them to the fore. Learners therefore need to be constantly exposed to live situations of diversity and empathy, inclusion and acceptance, so as to normalise the scenario. The most pressing challenge that one confronts in a classroom as in life itself, is that of 'perception', either curating it or breaking it. This is a question that could be researched further via demographic and geo-social profiling of learners. What is the appetite for risking 'perception' among learners and professionals and what ways may be chosen to manipulate or create the image of oneself that one wishes for others to perceive?

The world has seen a paradigm shift in the way education is being experienced post the Covid 19 pandemic. Digital platforms have kept the teaching learning process alive. However, the effectiveness of any digital education tool is dependant on several factors. While one is undoubtedly content, the other equally crucial is 'appropriacy'. There is an increasing concern in the country over finding the right content as well as appropriate visualizations of it. The intent is to educate while not causing too many culture contradictions. (Riapina, Natalia and Tatiana Utkina. 'Teaching EAP to Digital Generation Learners: Developing a Generation-Specific Teaching Strategy'. The Journal of Teaching English for Specific and Academic Purposes. Vol 10:2, 2022 pp 277-289.)

3. CONCLUSION

Before one concludes this paper on Cross Cultural Challenges in Communication Teaching in East India, it would be impertinent to not focus on certain very valuable insights about the growth path of professional English. It would also be amiss to not focus on cross cultural communicative challenges faced on the Internet, or, on the virtual platform.

Post Covid 19, the rules of communication have undergone a significant change. The universal templates are not country specific, but browser and application specific. Communication is entirely as per requirements of the users and the layout, tone and register are prompted by auto-correct. AI uses an American frame of reference for all documentation and content generation. The use of video materials as teaching aids in ESP courses has been advised and is widely already practised across countries. India is no exception. Deep Learning through digital platforms at once provides a visually enriching as well as holistic learning experience to the learners. (Milosevic, Danica. 'Video Tutorials as Potential Allies in the ESP Classroom'. *The Journal of Teaching English for Specific and Academic Purposes*. Vol10:2.2022, pp291-300)

What was once a nightmare for many teachers born on the wrong side of the digital divide (started their careers before 1999, when globalization and the internet revolution happened) has now become irreplaceable. Technology is a bridge that cannot be done without- what would one do without Microsoft Windows and its applications that create, calculate and present information at the press of a character? Here too, some superimposed cultural challenges arise - of the ideas and 'options' generated by the internet. The culture of the 'virtual' world of the netizen is falsely liberating and empowering, till the real world adapts and adopts the freedoms of choice. Until there is synergy between India's traditions and modernity achieved by using technology as a bridge, one will continue to categorise the communicative classroom as a heterogenous amalgamation of different philosophies that strain to find common ground.

The accessibility to internet may be the twin edged sword that may at once unite as well as divide minds, based on what information is consumed. Globally local, or 'glocal', seems a compromise of sorts where communication strives to address a common goal through a variety of negotiable parts/processes – striving to change the biases, one communicative task at a time!

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Review research paper

HUMOROUS ANECDOTES AS MOTIVATIONAL TOOL IN PURPOSEIVE COMMUNICATION

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Abstract. *With the demands of effective pedagogy for the 21st century, teachers are in constant search for a teaching tool that is more fun, and interesting and promotes positive learning. Thus, this study ascertained the effectiveness of humorous anecdotes as a motivational tool in improving students' performance in Purposive Communication. Using a quasi-experimental design, the student's speaking and writing performances were evaluated and the humorous anecdotes as a motivational tool served as a treatment for the experimental group and other different motivational tools were employed in the control group. Focus group discussion was also used to obtain students' narratives during the implementation. The findings assert that the participants taught with humorous anecdotes as a motivational tool exemplify the description of needs improvement for writing skills and noted deficient in speaking skills but with noticeable little progress. Despite little developments observed, the mean gains of the entry and exit performance levels in both skills and groups were comparable. In a deeper sense, humor in this study promotes a heartwarming teaching-learning process and an efficient teacher-student relationship. It is recommended that initiatives to augment the relevance of using humor in motivation may be considered by language teachers.*

Key words: *humorous anecdotes, motivational tool, purposive communication, language teaching, language research*

1. INTRODUCTION

To motivate means to drive someone to get something done. A categorically unmotivated person is someone who feels no encouragement and inspiration, while someone who is activated or energized towards extremities is thought to be motivated. In the schoolroom location, student motivation signifies the context of sincerely exerted effort and focus on learning to achieve fruitful results. Regarding motivation, movements on humor have been embraced by educators and trainers. Building rapport between students and teachers and getting shy and slow students involved in activities is shown in books that promote the utilization of humor in the classroom (Morreall, 2008).

On the other hand, in the Philippines, in the aspect of English language teaching and learning, educators put much effort on themselves into enhancing students' capacity in

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speech, language, and communication (Sarte, 2017). With the aim of the education sector to help every Filipino interact effectively in a multicultural setting, various communication teaching strategies are born, yet still necessary to be verified and reexamined regarding their effectiveness. Moreover, when administrators impose various pedagogical changes and enhancements, the teacher is in the best position and most qualified resource person to be consulted (Bacus, et.al., 2022).

On the other hand, gaining fluency in the different macro skills is a must for learners (Didenko, et.al., 2021). However, students at the tertiary level though having already taken various communication classes in their secondary years of education, still have been observed as having a difficulty in achieving a successful communication process thus, lead to communication breakdown. Purposive Communication is one of the few English courses offered at the tertiary level, especially for non-education-related degree programs. In purposive communication class, students are immersed in various engagements, providing them with learning prospects in communication that has to be carried out effectively and appropriately in a multicultural setting and a diverse context, locally and globally (Cariga, 2014).

Various classroom strategies have been used, yet their efficiency is seen to have not been proven a great help to the student's performance. Latest inventive approaches shall have to be employed in the teaching-learning standpoint with appropriate reinforcements during classroom instruction for the students' surety of achieving a meaningful learning process. With all the above-mentioned concerns in language performance, students' motivation is substantial in this matter with instructional humor as a tool.

Hence, this study is a move to the call for academic exploration in setting the mind of the learners towards meaningful learning in the world of English Language Teaching. It is conducted to ascertain if humorous anecdotes as a motivational tool are effective in improving students' performance in purposive communication.

This study ascertained the effectiveness of humorous anecdotes as a motivational tool in improving students' performance in Purposive Communication.

This specifically answered the following:

1. students' entry and exit performance levels in speaking and writing of the control and experimental groups;
2. the significant difference between students' entry and exit performance levels in speaking and writing; and,
3. the significant difference in the mean gain of both groups.

2. LITERATURE REVIEW

To be moved to do something is the characteristic of being motivated (Ryan and Deci, 2000). A person who is motivated is someone who is purposely driven and inspired; whereas an unmotivated person is an individual who senses no encouragement or impetus to act. What is essential for student learning is engagement and motivation in the teaching-learning setting. In the absence of motivation, learning is indistinct for the students. Stenberg (2005) believes that to achieve the purpose of attaining school success, motivation is very significant. The learner's diverse motivation characteristics may differ every time depending on the specified teaching-learning framework (Schlechty, 2001). Saeed and Zyngier (2012) contend about the various motivational types from the

qualitative viewpoint. In connection to this contention, it is stressed that more than its amount, the type carries some weight. This is the core idea for the embedded assertion from the statement “intrinsic and extrinsic”. Intrinsically motivated students have higher perceptions when it comes to competence and engagement, lower anxiety levels, and higher levels of achievement in obtaining enough input, compared to those not inspired intrinsically, according to numerous research studies (Wigfield and Wager, 2005).

Hence, it is established that a significant connection is present between success in education and the underlying driving force (Law, et.al., 2012). Understanding the various intrinsic motivation types is essential for every educative community. Utilization of more lively and attention-grabbing intrinsic motivation forms like digital sources, are only a few of the many substantial techniques for the attainment of success in learning (Ryan and Deci, 2000).

Humor has always been honored as instrumental and persuasive in setting up connections and even acquaintances. It is apparent to the thought that humor is associated with “telling and doing” and is marked to be hilarious reaching the point of making an individual laugh. Humor according to Mindess (1971) is described as a perception style based on life’s encounters and a frame of mind. It is somehow a strange standpoint, a kind of outlook, and something that possesses a healing dominance and capability. As explained by Raskin (1985), it covers the situation of someone who has heard or seen anything or something and then definitely giggles and falls laughing. This means that an individual finds the auditory and optical stimulus amusing. As stated by Morreall (2008), contentions that are introduced with humor cultivated open-mindedness about others’ ideas promoting a more peaceful and relaxing environment. Funny talks and lectures provide listeners with a soothing feeling and permit various concepts and successful collaboration (Ziv, 1983). It was determined by humor researchers that humor provides various advantages. This has been practiced in different disciplines and industries such as education.

One skill that may be enhanced because of humor incorporated into the teaching strategy is the “language skill”. Language is commonly imparted at the same time evaluated through these four skills, namely listening, speaking, reading, and writing. These are categorized into two main types of skills - productive and receptive skills”. Receptive skills include listening and reading, while productive skills are speaking and writing (Roberts, Jergens & Burchinal, 2005).

Various studies emphasize the impact of humor and its relationship to learning. A lot of scholars concur that various evidence on the utilization of humor provides progress to learning, yet still contains disputes at some parts. The very first question is on the employment and application of humor effectively and appropriately. As mentioned by Bryant and Zillmann (1989), the usage of humor in instruction is dependent on the correct employment of the humor type, considering the time, condition, and types of learners.

Instructional humor plays an important role in achieving good performance in teachers’ evaluation and the creation of a stress-free space conducive to learning. Robinson’s (1983) argues that “what is learned with laughter is learned well”. A superior conception and grasp of knowledge about the content of the curriculum are made visible as humor is appropriately and correctly utilized in the learning environment (Garner, 2006).

In this connection, Kaplan and Pascoe’s (1977) argument about humor states that it significantly requires being relevant and appropriate concerning its utilization as materials in classroom instruction to make learning meaningful. This claim is grounded in the study about students at the tertiary level who were recipients of a classroom lecture employing humor

significantly utilized and also another lecture without the manipulation of humor in the classroom. It is suggested in the results that humor assists and enhances students' learning intensity when appropriately implemented and designed along with the lecture material.

Upon attaining a vast advantage in the field of education, humor has to be employed since it is considered the most influential means of teaching and learning (Cornett, 1986). He believes that it is advantageous among teachers and learners who make use of instructional humor and concentrates on its favorable results and how these results are transformed into expanded learning along with motivation. Examples of humor results according to Cornett include supervising demanding attitudes and managing the acquisition of foreign language. Conversely, Teslow (1995) focuses on the connections of humor and its use in the classroom environment. It is pointed out that humor is acknowledged as a significant strategy in uplifting the spirit of motivation and is considered a reliever of tension. To be precise, humor has been very useful in teaching and is generally considered by students as an eliminating force of apprehension and anxiety.

Moreover, instructional humor operates positively in a way that it is also a mechanism for coping with stress and anxiety and a tool for establishing a joyful and relaxed environment, and thus is influential in many favorable ways (Banas et al., 2011). The effectiveness of humor is dependent on the learner's proficiency in perceiving and sorting out the suitability of instructional humor even though it is known to assist students' learning in the classroom. Various methodologies emerge about classroom humor as researchers use them in their respective studies. Strategy for the implementation of humor is known to have relied on diverse factors and one of these is culture (Teslow, 1995). Various customs and practices originate from the different foundations of humor and humor in the logical sense are interpreted contrarily from one civilization to the other, thus a funny message in a particular context might not be funny for the other. Specifically, this circumstance needs to be taken into consideration to validate the value of instructional humor in teaching.

Based on the contentions aforementioned, motivation is expected to be playing a role in learning. Learners nowadays are observed to be requiring positive reinforcements in the classroom setting or an educative community. To go along with this need and to achieve a successful teaching-learning process, humor is said to be one of the relevant tools in motivating students and uplifting students' interest in learning. Since individuals today seem to be more attentive when the conversation is integrated with laughter and funny stories, it is anticipated that humor is also effective in the classroom setting. Highly motivated individuals are expected to gain higher learning and thus humorous anecdotes as a motivational tool are looked forward to as the answer to the academic call for students' learning.

3. METHOD

3.1. Research design

This study utilized a quasi-experimental design with pre-test, treatment, and post-test. In this study, the humorous anecdotes are the independent variable, while the students' level of speaking and writing performance in the Purposive Communication course is the dependent variable. There were two groups of respondents in this study, the experimental and control group. The experimental group was taught about the concepts of Purposive Communication utilizing humorous anecdotes as a motivational tool. On the other hand, the control group was taught with the use of other various motivational tools like simple

recapitulation, typical question and answer portion, and ordinary image observation technique, to mention some.

3.2. Participants

This study utilized the purposive sampling technique. The respondents of the study were first-year college students at a state university in Cebu. They are only a few among the many first-year college students who still struggle in communicating appropriately and successfully as a whole. Each class has 26 enrolled students and has the same degree program. A total of 52 students participated in this study assigned to the control and experimental group.

3.3. Research instruments

For the pre-test and post-test, essay writing and extemporaneous speaking were administered. These tests were validated by experts and students' tasks were rated by 3 English professors using a rubric. Compiled humorous anecdotes during the treatment were obtained in congruence with the topics stipulated in the Purposive Communication course syllabus by the Commission on Higher Education (CHED).

The rubric for the essay writing to test the writing skills of the respondents contains five criteria and scored through a 4-point scoring range.

Consequently, the rubric for the extemporaneous speaking activity to test the speaking skills of the respondents contains ten performance standards and scored through a 5-point scoring range.

3.4. Data Analysis

After all the data were gathered, the data were tabulated. Statistical formulas were used in the quantitative results of the investigation. Mean difference was used to determine the results of the pre-test and post-test entry and exit performance levels of the respondents in both speaking and writing. A T-test was used to get the significant difference in the student's entry and exit performance levels in both groups.

4. RESULTS AND DISCUSSION

4.1. The Entry and Exit Performance Levels in Writing and Speaking of the Control and Experimental Groups

Table 1 revealed that the mean scores in all criteria in the entry performance level for both the control and experimental group *needs improvement*. This indicated that the students were not able to generate wider ideas out of the question given in the essay. It can also be deduced that the students at this level have not fully developed this particular literacy skill though they were already provided with their background knowledge and competencies which they gained when they were still in high school. The pre-test must have provided them the opportunity to activate their prior knowledge and construct new meanings upon answering the essay question though it was not seen to be adequate.

Table 1 Entry and Exit Performance Levels in Writing Skills
for Control and Experimental Group

Groups	Criteria	Entry Performance Level	Description	Exit Performance Level	Description
CONTROL	Focus and Details	2.28	Needs Improvement	2.40	Needs Improvement
	Organization	2.17	Needs Improvement	2.33	Needs Improvement
	Voice/Point of View	2.14	Needs Improvement	2.58	Excellent
	Word Choice	2.17	Needs Improvement	2.35	Needs Improvement
	Sentence Structure, Grammar, Spelling	2.01	Needs Improvement	1.94	Needs Improvement
	Totality	10.76	Needs Improvement	11.61	Needs Improvement
EXPERIMENTAL	Focus and Details	2.31	Needs Improvement	2.57	Excellent
	Organization	2.11	Needs Improvement	2.36	Needs Improvement
	Voice/Point of View	2.01	Needs Improvement	2.54	Excellent
	Word Choice	1.96	Needs Improvement	2.40	Needs Improvement
	Sentence Structure, Grammar, Spelling	1.83	Needs Improvement	2.08	Needs Improvement
	Totality	10.22	Needs Improvement	11.96	Needs Improvement

Further, it can be inferred then that in general, the students' prerequisite and fundamental skills and literary competence in writing have not been developed adequately to aid understanding of the required performance task in the pre-test which is essay writing. On the other hand, the mean scores of the exit performance level for both control and experimental groups were comparative to the mean scores of the entry performance level as shown in the table. There were noticeable little improvements in most of each criteria except for sentence structure; performance and spelling for the control group whose mean score decreased from 2.01 in the entry performance level and 1.94 in the exit performance level. Piaw (2012) revealed that the content-based humorous cartoons used as learning materials increased students' contentment from mastering complicated ideas in the reading, increased their challenge; strengthened their efficacy; increased curiosity and involvement. Similar to the entry performance level mean scores, sentence structure, grammar, mechanics, and spelling score, is observably lower than the other four for the two groups. There were only limited improvements in the writing performance of the students in both groups.

An experiment with university students explicated that while immediate recall of material was not affected, recall of the material six weeks later was significantly higher for

those who were taught with relevant humorous material (Kaplan and Pascoe, 1977). Students who receive instructions like this scored higher on standardized tests as revealed by Park and Peterson (2009). In congruence with the entry performance level in writing skills of both the control and experimental group, the exit performance level also has the description of *needs improvement*. This implied that the respondents' writing performance level after the experimentation was described still *needs improvement*.

In Table 2, the mean scores in most of the criteria in the speaking skills for both control and experimental group entry and exit performance levels were described as *minimal* and *deficient*. These results were all determined through an extemporaneous speaking activity for both groups.

At the entry level, it is obvious that the respondents have a limited idea about the given question and they were mostly overpowered by anxiety and stage fright. Students usually focus on the question by directly giving their answers without supporting materials like agreeing or contrasting to the existing body of knowledge. This is one of the factors why the respondents' writing performance is described as deficient for both groups at this level. Further, the results also showed that students may not have the time or the motivation to practice English whether spoken or written (Alda, 2018).

Meanwhile, there were also noticeable little improvements to their performance as reflected in Table 2 in the exit performance level of the control group. This signifies that students' performance in speaking for the control group still needs improvement after the implementation of humorous anecdotes as a motivational tool. One reason may be the relevance of the student's interests. Topics that can be anchored to current trends may be more engaging for them.

Consequently, the total mean score in speaking skills for the control group was described as *deficient* in the entry performance level and as *minimal* in the exit performance level. The *minimal* description means students formulate irrelevant responses to the prompts. Their speech did not flow well and was not logically organized. Overall, it has not reached the expected performance for tertiary-level students.

The mean scores of the entry performance level of the experimental group were relatively similar to the exit performance levels described as *below deficient*. In parallel to the control group, the experimental group respondents were also given a time limit upon delivery of ideas; however, it was evident that their speeches were very short making them unable to provide supporting materials to their answers. The highest mean score is (2.15) for formulating an introduction that orients the audience to the topic and speaker, similar to the results in the control group, described as *minimal*.

In totality, the entry and exit performance levels of the experimental group were described as *deficient*. It is evident that there were some improvements to the mean scores, however they were not able to increase much towards making the description minimal, basic, proficient, or advanced. Furthermore, most of the students spoke inaudibly, enunciated poorly, and spoke in a monotone and poor pacing tone that distracts listeners with fillers. They usually looked down and avoided eye contact, with nervous gestures and non-verbal behaviors. The message was generic or canned, and no attempt was made to establish common ground. Another factor that might have affected the results is the length of duration of the implementation. The study of Tribble (2001), revealed that a significant difference emerged between test scores measuring learning and recall on learners with longer and shorter exposure to humor in the teaching-learning process. Hence, a longer

period of implementation in this study might have shown a larger increase in performance from the pre-test to the post-test.

Table 2 Entry and Exit Performance Levels in Speaking Skills for Control and Experimental Group

Group	Criteria	Entry Performance Level	Description	Exit Performance Level	Description
CONTROL	Formulates an introduction that orients the audience to the topic and speaker	1.89	Minimal	2.50	Minimal
	Uses an effective organizational pattern	1.64	Deficient	2.01	Minimal
	Locates, synthesizes, and employs compelling supporting materials	1.25	Deficient	1.54	Deficient
	Develops a conclusion that reinforces the thesis and provides psychological insights	1.24	Deficient	1.39	Deficient
	Demonstrates a careful choice of words	1.82	Minimal	2.33	Minimal
	Effectively uses vocal expression and paralanguage to engage the audience	1.96	Minimal	2.33	Minimal
	Demonstrates non-verbal behavior that supports the verbal message	1.64	Deficient	2.03	Minimal
	Successfully adapts the presentation to the audience	1.63	Deficient	1.93	Minimal
	Constructs an effectual persuasive message with credible evidence and sound reasoning	1.94	Minimal	2.13	Minimal
	Totality	15.00	Deficient	18.15	Minimal
EXPERIMENTAL	Formulates an introduction that orients the audience to the topic and speaker	1.94	Minimal	2.15	Minimal
	Uses an effective organizational pattern	1.38	Deficient	1.53	Deficient
	Locates, synthesizes, and employs compelling supporting materials	0.78	Below Deficient	0.97	Below Deficient
	Develops a conclusion that reinforces the thesis and provides psychological insights	0.82	Below Deficient	0.96	Below Deficient
	Demonstrates a careful choice of words	1.51	Deficient	1.94	Minimal
	Effectively uses vocal expression and paralanguage to engage the audience	1.74	Deficient	1.96	Minimal
	Demonstrates non-verbal behavior that supports the verbal message	1.50	Deficient	1.72	Deficient
	Successfully adapts the presentation to the audience	1.57	Deficient	1.58	Deficient
	Constructs an effectual persuasive message with credible evidence and sound reasoning	1.56	Deficient	1.76	Deficient
	Totality	12.79	Deficient	14.58	Deficient

4.2. Significant Difference between Entry and Exit Performance Level

Even with the results above, as shown in Table 3, there is a significant difference between the entry and exit performance levels on students' writing skills for both the control and experimental group.

Table 3 Entry and Exit Performance Level Paired - Difference in Students' Writing Skills

Group	Mean	SD	T	P-Value
CONTROL				
Entry Performance Level	10.76	2.66	2.2701	0.0329
Exit Performance Level	11.61	1.95		
EXPERIMENTAL				
Entry Performance Level	10.22	2.35	3.7133	0.0011
Exit Performance Level	11.96	1.15		

Note: **Significant at 0.05

Further, results showed that there is a significant difference between the entry and exit performance levels in writing skills of the students in the control group. The means suggest that the exit performance is significantly higher than the entry performance. Students' essays, in this case, displayed improvement in the focus and details, organization of the topic given, point of view or voice of the content, the choice of words, as well as the sentence structure, grammar, mechanics, and spelling. This implies that other methods of motivation which includes simple recapitulation, typical question, and answer portion, and ordinary image observation technique can help improve writing performance. These motivational tools serve as an introductory activity to the topic of the day and have been continuously used by a lot of educators.

On the other hand, based on the calculations, results in the experimental group showed that there is a significant difference between the entry and exit performance levels performance on writing skills of the students in the experimental group. The means suggest that the exit performance is significantly higher than the entry performance.

Similar to the control group, students' essays displayed improvement in the focus and details, organization of the topic given, point of view or voice of the content, the choice of words, as well as the sentence structure, grammar, mechanics, and spelling. It can be gleaned that the anecdotes provided the students with an avenue to improve students writing skills. It strengthened their will to learn more and thus, radiates to their performance. The study of Blyth and Ohyama (2011), revealed that students' achievement in vocabulary and awareness was measurable as they explored the effects of using humor in EFL classrooms. Additionally, Banas, et.al. (2011) explicated that due to less stress and anxiety, humor can increase comprehension and cognitive retention and when humor is related to course materials it can make information more memorable. Students' ability on topic recall was activated and cognitive retention increased because of humorous anecdotes used as a motivational tool, and thus helped them effectively in providing input during the writing activity.

Table 4 reflects the level paired - difference in the entry and exit performance levels in the students' speaking skills for both the control and experimental group.

Table 4 Entry and Exit Performance Level Paired - Difference
in Students' Speaking Skills

	Mean	SD	T	P-Value
CONTROL				
Entry Performance Level	15.00	5.89	3.1611	0.0044
Exit Performance Level	18.15	6.37		
EXPERIMENTAL				
Entry Performance Level	12.79	4.81	1.8255	0.0809
Exit Performance Level	14.58	6.68		

Note: **Significant at 0.05

Based on the table, the results showed that there is a significant difference between the entry and exit performance levels in the speaking skills of the students. This suggests that the exit performance is significantly higher than the entry performance. The students' speeches in the group displayed improvements in formulating an introduction that orients the audience to the topic and speaker, using an effective organizational pattern, locating, synthesizing, and employing compelling supporting materials. They also showed progress in developing a conclusion that reinforces the thesis and provides psychological closure, demonstrating careful choice of words and using vocal expression and paralanguage to engage the audience. Moreover, the students exhibited development in demonstrating non-verbal behavior that supports the verbal message, adapting the presentation to the audience, and constructing an effectual persuasive message with credible evidence and sound reasoning.

The control group who has experienced motivational methods which includes simple recapitulation, typical question, and answer portion, and ordinary image observation technique, their speaking skills were also tested through class participation during the discussion and oral recitations. This implies that these activities as inserted during classroom instruction in the aspect of motivation, in particular, served as their grounds to have enhanced their speaking skills. The lectures also provided the students with inputs as to what to say and answer during the extemporaneous speaking activity since the questions were all related to the subject, Purposive Communication.

The data showed that though the exit performance levels weighted mean score is higher than the entry performance level's weighted mean score of the experimental group, there is no significant difference between the entry and exit performance levels on the speaking skills of the students. In this part, students have received instruction through the implementation of humorous anecdotes as a motivational tool, yet their performances remained constant. Improvements were visible as shown through their mean scores, yet they did not display any significant difference after all. Prevailing factors on this result include the duration of implementation of the intervention, students' interest in the topic during evaluation, and sustainability of the student's motivation. A longer period of implementation in this study might have shown a larger increase in performance from the pre-test to the post-test. Anyhow, topics that boost students' interests like current trends on social media and gaming, might have improved their performance. Moreover, it was observed that the motivations of the students were not similar at the same time. The level of eagerness and interest they had was not directly similar during the time of the discussion and the time when they were evaluated. This might be because of personal apprehensions and obstructions that they have on their own along the way. This implies that experiential backgrounds contributed to the student's performances.

Table 5 reflects the comparative analysis of the mean gain of the student's writing skills between the control and experimental group.

Table 5 Comparative Analysis of the Mean Gain of the Student's Writing Skills in Control and Experimental Groups

	Mean Gain		T	P-Value
	Mean	SD		
Control Group	0.85	1.83	-1.4859	0.1444
Experimental Group	1.74	2.29		

Note: **Significant at 0.05

As presented in the table above, there is no significant statistical difference among groups concerning writing. Thus, the results are comparable. This explains that whether instructors apply simple recapitulation, typical question and answer portion, and ordinary image observation technique, or humorous anecdotes as a motivational tool in the subject, students' performance in writing will still be relatively similar. This is supported by the claim of Radosavlevikj (2020) that because students come from varied background settings, some students may feel uncomfortable and less confident to engage in any communication involving a foreign language.

The application of other motivational tools in the control group may or may not provide any help in the students' writing performance. Sectioning which is beyond the researcher's control and exposure to language which is English of both are the underlying influences of these results. Results might vary if respondents delivered their speeches in the extemporaneous speaking activity in their language of comfort or in vernacular. One factor that affected students' performance in the experimental group, in particular, is that students' motivation during the discussion and as the anecdotes were presented may set differences by the time they were writing for their essay as evaluation.

Moreover, Ross (2005) claims that there is a time and a place for humor. It is sometimes inappropriate in certain situations and at certain times. The social and physical restrictions which are present at a given time and in a given area are different from those restrictions which are present at other times and in other areas. In addition, Rosenthal (2011) explains that the humor of the last decade might no longer be appreciated today and the humor of civilization might not be acknowledged as humor in the other. Similar to the observation above, the level of eagerness and interest of both groups is not directly similar during the time of the discussion and the time when they were evaluated. This might be because of personal apprehensions and obstructions that they have on their own along the way. This implies that psychological orientation contributed to the respondents' writing performance.

Looking into the critical lens and exploring the paradigms of this study, factors that were taken into consideration include that these students are majoring in information technology. It can be gleaned that improving their writing or speaking skills does fully benefit their field of profession after all. Facing computers and programming software do not require much of the skills tested, thus only show a little significance or improvement with the help of the motivational tools used, namely simple recapitulation, typical question and answer portion, ordinary image observation technique, and humorous anecdotes.

7. CONCLUSION AND RECOMMENDATIONS

Humorous anecdotes as a motivational tool create an impact on the activation of students' interest and integration of values into the lessons. Its effectiveness is based on the interest, knowledge, skills, and values acquired by the students in the subject during classroom interaction. As the students' affective filter was removed because of the humorous anecdotes, their interest to learn was triggered, so the welcoming of new knowledge happened and this radiates to their skills and values acquired. In a deeper sense, humor in this study promotes a heartwarming teaching-learning process and an efficient teacher-student relationship. The humorous anecdotes as motivational tools encourage a healthy and effective beginning of every lesson. It carries a substantial path for willingness and motivation. Thus, educational institutions may undertake initiatives to augment the relevance of using humor in motivation, particularly in the confines of higher education institutions. They may in turn send teachers to seminars and training that promote modern strategies for motivations like the utilization of humor to assimilate suitable and effective strategies.

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Review research paper

EMPOWERING TEACHERS AND STUDENTS TO COPE WITH THE STRESS OF ONLINE TEACHING AND LEARNING: FINDINGS FROM A PILOT PROJECT ON PSYCHOSOCIAL SUPPORT IN THE LANGUAGE AND TRANSLATION CLASSROOM

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Abstract. *In times of crisis, emergency education makes significant contributions to individuals and societies by providing a sense of normality (Johannes 2012). As teachers facilitate the learning process and are expected to support students emotionally, Muldong, Garcia & Gozum (2021) suggest that work-from-home teachers should be provided with psychosocial support to address the mental and emotional stress caused by the Covid-19 pandemic. El-Monshed, El-Adl, Ali and Loufy (2021) and Carreon & Manansala (2021) suggest that educational institutions should also take measures to improve students' mental health and academic performance and make it a priority in the current context.*

This paper reports the findings of a project on psychosocial support at Blaze Koneski Faculty in Skopje from March to June 2021 involving 15 language and translation teachers and 121 students. The teachers attended a series of workshops guided by a trained clinical psychologist. The workshops aimed at providing immediate psychosocial assistance to teachers to cope with the stress of the pandemic, to sensitise teachers to the students' needs in an emerging crisis and to empower them to employ new ways of student engagement in the online classroom. The training concept was based on the assumption that one's self-care and well-being are prerequisites for one to be able to care about others (in this context the students).

The teachers tested various methods at two levels of classroom communication. They engaged in informal communication and introduced well-being techniques to create a relaxing class atmosphere and to facilitate the learning process. They also involved students in participative activities to help them take hold of their learning. Teacher and student feedback has been positive and points to the encouraging effect of this approach in the online environment and beyond it. It shows that the modern translation classroom, be it physical or virtual, requires giving students an active voice and a sense of control over their learning. It also shows that moving away from adhering to technical material to enrich the curriculum with topics and methods that address well-being and mental health is beneficial.

Key words: *emergency education, psychosocial support, well-being, teaching methods*

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1. INTRODUCTION

The COVID-19 pandemic has caused unprecedented disruptions in everyday life throughout the world. Soon after the outbreak of the disease, which first occurred in China in December 2019, public health authorities all over the world introduced restrictions to limit people's movements and stop the transmission of the virus. Restrictions on social contact, such as lockdowns and bans on public gatherings, and prevention measures, such as quarantine, self-isolation and social distancing, have affected all areas of human life. They have led to the closure of all schools and universities as well, interrupting the learning of more than 1.6 billion children worldwide (UNESCO 2021). As it was difficult to predict how long the emergency would last and in order to provide students with a sense of normalcy, authorities all over the world decided to transfer schooling online, so schools and universities moved to emergency remote teaching via online platforms (Sundarasan et al. 2020: 2), (Ihnatova et al. 2022) and (Ononiwu 2021). At the same time, Holmes et al. (2020: 548) present scientific data showing that many of the preventive measures themselves (quarantine and social and physical distancing, which lead to social isolation and loneliness) are risk factors for mental health issues and are strongly associated with anxiety, depression, alcohol and substance misuse, domestic and child abuse, self-harm and suicide attempts and psychosocial risks such as social disconnection, lack of meaning, cyberbullying, bereavement, loss. On this account, it is evident that measures to prevent the spread of the disease should be accompanied by measures to build resilience and coping strategies that help counteract the detrimental effects of the COVID-19 pandemic on people's mental health and well-being. The more so because besides being acute in the short term, the psychological and social impacts of emergencies can also undermine the long-term mental health and psychosocial well-being of the affected population, which may, in turn, threaten peace, human rights and development (IASC 2007: 1).

The purpose of this paper is to discuss possible approaches to developing coping strategies and improving the well-being of university teachers and students. It presents the findings of a pilot project on psychosocial support for language and translation teachers and students. First, we present the concept of emergency education, followed by the biopsychosocial model of mental health to locate the role of education in crisis situations. Second, we discuss the impact of the COVID-19 pandemic on higher education in general and on the psychological well-being of teachers and students. Then, we present the project and the methodology, followed by the main findings and recommendations. Finally, we discuss the results and suggest possible future steps.

2. BASIC DEFINITIONS

The terms *mental health*, *psychosocial well-being*, *psychological well-being* and *well-being* are closely linked and overlap (IASC 2007: 1). In this paper they are used interchangeably to refer to the state of emotional, psychological, and social well-being, "in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community" (WHO 2018). The term *psychosocial support* is used for any "non-therapeutic intervention" (Segen's Medical Dictionary 2011) and "support that aims to protect or promote psychosocial well-being or prevent or treat mental disorders" (UNHCR 2022: 2).

3. THE CONCEPT OF EMERGENCY EDUCATION

Emergency education is an approach to the education of children during times of crisis caused by man-made (e.g. wars and conflicts) or natural disasters (e.g. earthquakes, floods, pandemics). In this context, the term “emergency” does not refer only to the immediate period of crisis, but it also covers the post-crisis reconstruction and rehabilitation period (Sinclair 2002: 22). The theme of education in emergencies came to the fore when the governments, and organisations represented at the World Education Forum in Dakar 2000 pledged to “meet the needs of education systems affected by conflict, natural calamities and instability and conduct educational programmes in ways that promote mutual understanding, peace and tolerance, and that help to prevent violence and conflict” (World Education Forum 2000: 8). Emergency education is “a set of linked project activities that enable structured learning to continue in times of acute crisis or long-term instability” (Nicolai 2003: 11), or “education that protects the well-being, fosters learning opportunities, and nurtures the overall development (social, emotional, cognitive, physical) of children affected by conflicts and disasters” (Save the Children Alliance Education Group 2001 in Sinclair 2002: 23). In essence, the aim of emergency education efforts is to ensure children’s rights to education and to protection are exercised during conflicts and disasters so that they are better prepared for the future and able to contribute to the rebuilding of society after the end of the crisis. In emergency situations, education plays a short-term goal of meeting children’s basic needs and a long term goal of helping them reduce their vulnerability to disaster and build new lives (ibid: 6) by developing children’s survival skills, individual and social development skills and academic skills (ibid.:113). Whereas in emergencies education itself is a key psychosocial intervention by bringing a sense of normality, dignity and hope (IASC 2007: 148), Halstead & Affouneh (2006: 203-4) claim that a common feature of all emergency education programs is that they give low priority to personal, emotional and spiritual education, although this is the biggest need of all for children in crisis. They claim that to be able to develop resources to rise above the crisis and rebuild hope for a better future, children need inner strength, personal qualities of character and a rich sense of themselves and their own identity. We tend to agree with this claim and we would also extend it to teachers working in emergency education. According to IASC, teachers play a significant role in supporting the mental health and psychosocial well-being of students while struggling with their own emergency-related mental health and psychosocial problems (IASC 2007: 148). Emergency education should, therefore, support the emotional needs of teachers too. It is with these considerations in mind that we have approached the project we report on in this paper. The underlying motive was to complement education during the COVID-19 emergency with psychosocial support to empower students and teachers to cope with the stress of the pandemic and online teaching and learning so that they come out of the emergency better equipped to deal with daily life and possible future emergencies. We test this approach in the language and translation classroom.

4. THE BIOPSYCHOSOCIAL MODEL OF MENTAL HEALTH

According to Engel and Romano’s biopsychosocial model of health (1977 in URMC), health, including mental health, is not the absence of disease but rather a complex interaction of biological, psychological and social factors. To understand mental health, it is not sufficient to investigate biological factors only (genetic predisposition or pathophysiological changes), but also psychological and social components of human existence (Engel 1977: 132). The

biopsychosocial approach is integrative and multidisciplinary and requires active engagement and self-awareness (URMC). This model is useful for our study as it incorporates aspects of human development that are relevant in education, such as psychological (social skills, coping skills and self-esteem) and social aspects (school and peers) (see Figure 1 in Physiopedia).

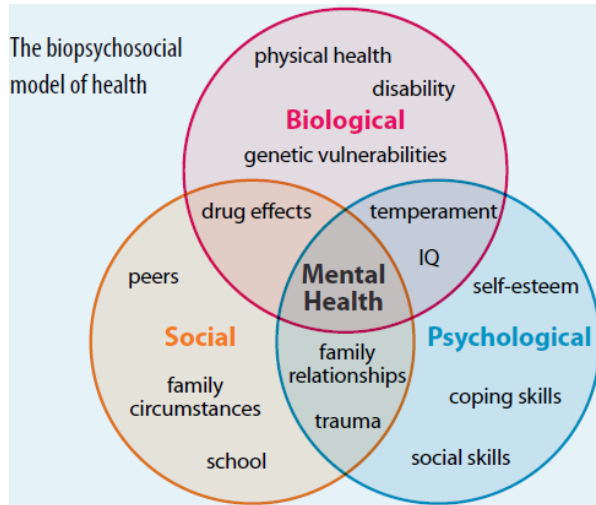


Figure 1 The biopsychosocial model of health

5. THE IMPACT OF COVID-19 ON MENTAL HEALTH

Since the start of the pandemic, a number of research studies have demonstrated that COVID-19 and the accompanying changes and restrictions in daily life have had an enormous negative impact on people's psychological well-being. Teachers' and students' well-being has been affected by changes in society due to lockdowns and social distancing, as well as by the new circumstances of online teaching.

The pandemic came with the loss of social interaction (Cardenas et al. 2020: 2187) and mobility, fear or direct experiences of infection, information-related anxiety (either from lack or excess information or misinformation), loss of relatives or friends, monotonous lifestyle (Sundarasan et al. 2020:2) with no extra-curricular activities (including lack of physical activity), lack of personal space at home, longer screen time (Wang 2021: 946), uncertainty about the future (especially for final year students), or, for some, even domestic violence or abuse (Cardenas et al. 2020: 2187).

Online classes came with issues like lack of internet access, technical equipment and digital skills (Naidoo & Cartwright 2020: 4), work overload (Olawale et al. 2021:185), difficulties of adapting the face-to-face curriculum, assessment and evaluation to the online classroom, blurred boundaries between work/study and family and deterioration of work-life balance (ILO 2020: 18).

All these challenges have affected teachers and students physically, behaviourally, socially, emotionally and cognitively. Both teachers and students have demonstrated shifted

eating and sleeping patterns, social withdrawal, cyberbullying, alcohol misuse and addiction, absenteeism, anxiety, stress, depression, suicidal ideation or attempt, rigid thinking patterns, memory issues, lack of concentration, lack of motivation, lower job/class engagement and performance (Chaturvedi et al. 2021: 6, El-Monshed et al. 2021: 2, Sundarassen et al. 2020: 3, Rajkumar 2020: 3, ILO 2020: 6-7, Oncevska-Ager & Ivanovska-Naskova 2020).

Research in various countries on different continents has also shown that students have experienced serious deterioration in all mental health indicators with clinically relevant symptoms of PTSD (30.8% in Chi et al. 2020, 49.4% in Ristevska-Dimitrovska 2020), depression (23.3% in Chi et al. 2020, 74.5% in El-Monshed et al. 2021, 34.19% in Odriozola-González et al. 2020, 42.5% in Ristevska-Dimitrovska 2020), anxiety (15.5% in Chi et al. 2020, 24.9% in Cao et al. 2020, 29.8% in Sundarassen et al. 2020, 47.1% in El-Monshed et al. 2021, 21.34% in Odriozola-González et al. 2020, 28.2% in Ristevska-Dimitrovska 2020), stress (40.5% in El-Monshed et al. 2021, 28.14% in Odriozola-González et al. 2020) and even suicidal ideation (19.6% in Ristevska-Dimitrovska 2020).

These findings suggest that psychosocial assistance and support is necessary for students in the current crisis. As teachers are in the frontlines of emergency education, it seems they can be the ones to provide such support. However, to be able to do so, they should be given psychosocial support too (Muldong et al. 2021, Odriozola-González et al. 2020, Aperribai et al. 2020: 2). Teacher effectiveness in creating a safe and supportive interaction with students depends on their own social and emotional skills and well-being. Therefore, providing support for teachers' own psychosocial well-being is an essential component of supporting students (IASC 2007). In this paper we present the approach we took as a possible solution to providing psychosocial support to both teachers and students during the COVID-19 pandemic. Therefore, hereby follows a description of the project aims and activities, research questions and methodology.

6. THE PROJECT

Due to the nature of their profession, teachers are constantly in direct communication with their students. They are expected to guide them and to offer advice and help whenever possible, but sometimes they do not feel able to respond to such challenges. In order to provide support for their students and be able to assist, they have to have psychological stability and take care of their personal well-being first.

This was the motivation behind the project. It was designed to explore the possibilities for coping with the challenges posed by the coronavirus pandemic. Its aim was to identify critical assistance points based on empirical data with a view to enhancing educational practices and personal working conditions through greater participation of all relevant parties, better communication and the development of teams and support networks. Teachers were the primary target group of the project, and students were the secondary target group. Activities were organised accordingly during the period March and June 2021.

6.1. Teacher-centred component

The teacher component included a series of nine online workshops with a group of fifteen teachers from the Blazhe Koneski Faculty of Philology in Skopje, under the guidance of a clinical psychologist. The work was based on three important aspects: 1) personal life management and improvement of the quality of life in times of pandemic; 2)

student-teacher relationship enhancement through direct contact, motivation, encouragement, setting personal examples and exchanging experiences, and 3) enhancing the overall learning environment for the students in times of pandemic through equality and greater involvement in problem solving strategies with a view to empowering students to be able to adapt to the changes in life and to use the challenges for personal development and well-being.

Relying on the biopsychosocial model of mental health, the basic characteristics and developmental potential of crises, as well as on the concepts of attachment and authenticity as crucial preconditions for progress, the teachers focused on the importance of self-care as the most useful tool for enhancing students' well-being and assisting the learning process. During this teacher-oriented phase, they explored possibilities for safe self-study, self-recognition and self-care with a view to boosting their self-confidence, sense of compassion, tolerance and resolution, which are necessary to understand personal strengths and weaknesses and to express one's personal authenticity and autonomy. Being authentic and autonomous empowers people to easily find solutions to problems and adapt to difficult situations effectively with better chances for survival. This has been achieved through concrete strategies and tools which enable them to get to know themselves better. For example, they learned about and practised the healing power of deep breathing. This is a very effective relaxation technique that can be used in situations of stress and anxiety as a self-help technique which restores mental and physical balance whenever one needs it. Teachers were encouraged to dedicate time to this technique on a daily basis. The next technique was role play designed to help prioritise and find solutions to problems in stressful situations relying on key coping principles such as attachment, authenticity, participation, originality, creativity, safety, flexibility, employed in situations of prolonged crises. It was intended to demonstrate the need of being able to react and prioritise differently in stressful situations and recognise the importance of flexibility, which lead to creative and original solutions. Another tool that was used was the development of a personalised self-care model which is supposed to entail a personal self-awareness routine as a vehicle for establishing a relationship with oneself and accepting one's strengths and weaknesses as a precondition for bonding with other people. This model is intended to promote self-development and enthusiasm for daily routines. An individual approach to this technique is required in order to focus on rituals that best serve one's needs and personality. These might vary, like for example: visualisation, meditation, yoga or other forms of physical activity, drinking coffee or tea at a particular time of the day, taking up hobbies, learning new skills and having varied interests, or anything else that is effective and helps create a better relationship with oneself. Another technique was creating a safe place. This technique involves imagining a situation in which you feel safe, happy and relaxed, drawing that situation on a piece of paper and finding your place in the drawing. It is then necessary to visualise the safe place and to try to feel the emotions behind the scene and to evoke any colours, feeling, sounds or presence of other people as well. This is a useful relaxation technique which can be used when under stress or when experiencing a negative emotional charge. The techniques were accompanied by frequent discussions about teachers' feelings and emotions at a particular time, as well as attempts to recall how they felt in the past compared to the present. These discussions were used in order to help teachers better understand how they felt and why, especially if they experienced negative emotions, frustrations or any kind of unhappy disposition. Frequently, techniques were combined for optimal results, for example, the visualisation technique was done after a session of deep breathing exercise. The teachers regularly discussed the benefits of the techniques in small groups, brainstormed ideas and exchanged opinions on the

importance of self-care as a tool for helping others. They also repeatedly accentuated the usefulness of the workshops, which helped them better understand themselves and adopt new approaches to problems and challenges.

Through this continuous process of self-recognition and self-care, the teachers empowered themselves to enhance their relationships with the students and establish even more solid bonds based on humanity and empathy. This has put a completely new and different perspective on the teacher-student relationship.

6.2. Student-centred component

In the student component of the project, taking a student-oriented approach, the teachers explored possibilities for improving the teaching methodologies by using benefits of self-care techniques and by promoting direct communication with the students, stronger engagement and independence during classes and improving the psychosocial aspect of the educational process. The aim was to boost students' self-confidence and to show them that they can be active participants in solving problems during turbulent times.

Firstly, the teachers introduced the project to the students and informed them about their intention to modify the teaching methodology by giving them opportunities to become more active participants in the educational process. Furthermore, they devised different teaching models containing good practices relying on their experience with the self-care techniques. They tested the models with different categories of students adopting an individual approach when choosing the activities to be done depending on different teaching objectives for various courses (language, literature, translation and interpreting and teaching methodology). The students belonged to different years of study and attended different courses (language, literature, translation and interpreting and teaching methodology).

The teaching models tested rely on two basic segments: 1) informal activities and 2) formal activities that were conducted online via Zoom, MS Team, Google Meet and similar platforms for distance learning. The informal activities offered possibilities to spend time during the class to discuss everyday topics and current affairs. These included visualisation techniques, in which students were asked to imagine a problem they faced at that moment and to try to put it in a positive perspective by offering a creative solution. Another example were discussions on leisure activities, pastimes or hobbies that students had adopted during the pandemic and sharing information about any common interests and activities. Students also watched inspirational videos about well-being in general, including topics like gratitude, kindness or happiness, which motivated them to reconsider their attitudes and priorities and to learn new well-being techniques that might be useful when faced with difficulties or lack of motivation. Discussions also dealt with feelings in general and the possible motivation behind those feelings, sharing ways of coping with the challenges of the pandemic. Students also practiced deep breathing techniques and were informed about their benefits and discussed possibilities of developing a personalised self-care model. The informal activities were conducted anytime during the class, whenever the teacher noticed poor concentration, distraction or lack of enthusiasm in students. These activities helped the teacher to get to know the students better, understand how they felt and respond with empathy and care for the students.

The informal activities were combined with formal methods, which offered possibilities to cover different areas of the curriculum with a stronger students' engagement compared to traditional frontal teaching modes. The students actively participated in designing different

course aspects (objectives, methodology, assessment and evaluation). Switching from listeners to active participants in the educational process, students become more responsible and better prepared for professional challenges. This approach makes them equal partners in the teaching process.

Formal activities included presentations, preparation of classes and lectures, homework assignments, peer-reviewing and assessment tasks, project team work, discussions and debates, simulations and role plays, and even students' leading the class themselves. For example, during language classes, students were assigned the task of preparing presentations on a certain grammar topic by working in small groups. After having finished, the groups shared the presentations, reached conclusions, discussed problematic areas and possible solutions independently, while the teacher monitored the class and participated with comments or clarifications when necessary. The goal of the activity was to enable the students to understand the benefits of active involvement in the learning process. Interpreting students, for example, took part in role plays in which they simulated everyday interpreting situations (hospital, police station, school, court etc.). They worked with specially designed scenarios which they prepared themselves and assumed different roles. After the task was done, they discussed each other's performance, pointing out good practices and errors and sharing opinions. The teacher moderated the class with comments and advice. The aim of the activity was to share knowledge and to boost students' self-confidence. Translation students worked on creating their own assessment criteria based on pre-existing assessment models and their own practical experience. Working in small groups on translation projects, they were given the task of reviewing other colleagues' translations according to previously established assessment criteria using Google Docs options for reviewing. In the end, the translations and the comments were compared and the errors were discussed, which was very instructional for the students. Within the teaching methodology classes, the students were given the role of a teacher and were asked to prepare the class, plan activities and assign tasks to other colleagues and actually hold the class. On another occasion, they watched a previously recorded online class taught in a secondary school, and then without the aid of the teacher, discussed the strengths and the weaknesses of the teaching methods used in the video and independently drew conclusions. During literature classes, students had the possibility to discuss the concept of suicide, for example, which was a key issue in the novel they worked on, to share their view and to relate it to other literary texts or to everyday life.

7. RESEARCH QUESTIONS AND METHODOLOGY

Based on the assumptions and the model presented above, we have formulated the following sets of research questions regarding this intervention:

1. Can the intervention benefit teachers' personal and professional well-being? If so, to what extent?
2. Which well-being techniques do teachers find to be the most useful ones?
3. Which teaching activities do teachers find to be the most useful ones?

On the students' end, we formulated the following research questions:

4. How do students find the teachers' attempts at introducing/practicing participative teaching methodologies? What are their preferences?

With a view to providing answers to these questions, two questionnaires were compiled: one for the teachers and one for the students. The teacher questionnaire comprised 22 questions (multiple choice, open ended and linear scale questions). It was designed to explore the teachers' attitudes on their project experience and the potential personal and professional benefits from it.

The student questionnaire aimed at gathering the students' opinions about the different forms of engagement (formal and informal) in classes. It was intended not only to explore their attitudes towards the teaching approaches adopted during the project, but also to demonstrate to them that their opinions matter. The questionnaire consisted of nine multiple choice and open-ended questions. The questions were intended to explore students' attitudes on the possibility to participate more actively in classes than usual and their preferences related to the teaching methodology ranging from frontal approaches (which include a more traditional methodology without necessarily engaging the students actively in class activities) to more interactive approaches (which make the students active participants in the learning process). Furthermore, they investigated students' views on possible advantages and disadvantages of active engagement during the classes and whether the classes should include activities and techniques for reducing stress and improving the overall well-being on a regular basis.

8. RESULTS

8.1. Teacher-centred component

Twelve out of 15 participating teachers completed the questionnaire (response rate of 80%). The respondents were predominantly female (84.6%), aged between 30 and 60 years (with the majority falling within the 40 to 50 age group (46.2%), and the minority falling within the 50 and 60 age group (15.4%).

When it comes to workshop attendance, the results reveal that the workshops were well attended. Total of 38.5% of respondents participated in all workshops, whereas 46.2% of them attended most workshops; only few of them (15.4%) did not participate regularly in the workshops.

Regarding the influence of the self-care techniques on their overall well-being, 81.4% of respondents marked it as positive (on a scale of 1 to 5, they gave a mark of 4 (58.3%) or 5 (23.1%)). According to their answers, these techniques helped them improve concentration and focus, better understand their emotions in times of crises, enabled them to cope with the challenges and difficulties that arise from long isolation and working from home; they restored mental and physical balance and promoted self-respect and equality among the academic staff since they showed common weaknesses, fear and frustrations arising from the pandemic, and offered an opportunity to find solutions together as a team. More importantly, they raised awareness about the importance of overall well-being in times of prolonged crises. According to the results, the most useful self-care techniques were deep breathing exercises, safe place visualisation, yoga, everyday rituals and routines, team work, journaling. Teachers revealed that they were happy to understand that self-care promotes care about the others as well, and that it is very important to be flexible and to learn how to prioritise and dedicate time to oneself in times of crises. The self-care techniques proved to be useful, which is evidenced by the fact that a huge number of respondents continue to use some of them in everyday life. Thus, 46.2 % said that they use

them regularly on a daily basis, and an equal percentage said they do it occasionally. They mostly use deep breathing exercises, safe place visualisation techniques, as well as techniques for reframing causes of stress, yoga, meditation, journaling and everyday rituals and routines. Only 7.7% of respondents do not use them at all in everyday life.

With regard to how much the experiences from the project influenced the students' active participation in classes, most teachers were indifferent as 69.2% of them gave a mark of 3 (on a scale of 1 to 5). Only 1/3 of respondents (30.8%) consider that the project had a positive influence on students' being more actively involved in the classes (23.1% marked it with 4, whereas 7.7% marked it with 5). According to respondents, the online classes are more interesting and there is less room for boredom or monotony, they increase student's motivation and they achieve better results, which leads to higher self-esteem and self-confidence. Furthermore, they promote a more straightforward relationship between teachers and students, making them equal partners in the learning process. Some teachers revealed that, since they had been intuitively using some of these techniques even before the pandemic, the experiences from the project only confirmed the importance of putting the teaching material in a wider context and relating it to real life situations and strengthened their motivation to work even more enthusiastically than before.

As regards the most beneficial aspects of the activities done with the students, the results show that the opinions are in favour of informal activities since the majority of respondents think that either both types of activities (informal and formal) are equally useful (46.2%), or that the informal activities are more beneficial (38.5%). Only 15.4% of respondents think that formal activities are more practical and serve a better purpose. The respondents who are in favour of informal activities argue that they relax the atmosphere during the classes and contribute to a more direct relationship between teachers and students. They also encourage the students to be more enthusiastic, to give feedback and to take an active role in the learning process. Those who prefer formal activities explain that they use them more often than informal activities because they think they are more suitable for introducing new concepts and ideas. They base their opinions on the impressions they have got when comparing the results of the students' work after having done informal and formal activities, the latter proving to be more indicative of students' progress. However, the important thing to note is that those respondents who are in favour of both types of activities actually conclude that they are inseparable and provide complementary benefits when combined, since mental balance leads to professional success and vice versa. The majority of respondents say that they continue using some of the informal activities during classes: 30.8% do that on a regular basis and an equal percentage of respondents reported that they do it occasionally. Among the most frequent activities they use are deep breathing exercises, visualisation, listening to relaxing music, discussions and relating the teaching material to everyday situations. There 38.5% of respondents did not continue using any of the informal activities during classes, mostly because they did not have classes at the time, but plan to use them in the future. Some say it is because the students were shy and did not respond well to the informal activities. When it comes to whether they continued using formal activities during classes, the results show that 30.8% do it regularly and 38.5% of them do it occasionally. Most often, these activities include presentations, preparation of classes and lectures by the students, homework assignments, peer-reviewing and assessment tasks, project team work, discussions and debates. On the other hand, 30.8% responded that they did not continue using any of the formal activities during classes; mostly because they did not have classes at the time, but pointed out that they would use them in the future.

When asked to compare the usefulness of the traditional/frontal teaching and interactive teaching with greater students' involvement in classroom activities, the respondents' answers are in favour of interactive teaching. More precisely, 61.5% of respondents think that the interactive approach is more useful for purposeful learning, 23.1% think that both approaches are equally useful, whereas 15.4% reported that they are not sure about the answer. Generally, they think that when students are actively involved in the learning process, then learning becomes "more personal and lasting and they feel they have done their share of the task". It encourages them to articulate their attitudes and share opinions and knowledge and raises their self-confidence and feeling of achievement. They also emphasise the importance of traditional/frontal teaching approaches, and point out that different teaching and learning goals require different approaches. The frontal approach ensures the teacher's input and control over the educational process, while interactive approaches offer possibilities for a "dynamic learning environment in which knowledge can be constantly upgraded, promote critical and creative thinking and improve communication skills". They conclude that these two methods should be combined since both have advantages for the students.

According to a large majority of respondents (92.3%), their participation in the workshops had a positive influence on their overall personal and professional well-being and they would recommend the workshops to other colleagues. They also provided additional comments saying that such projects are more than welcome since they "raise awareness about the importance of mental health of all participants in the educational process in general". For some of them, the project provided a "transformational experience on a personal and professional level which helped them to share knowledge and to meet wonderful colleagues".

8.2. Student-centred component

The results of the questionnaire on students' opinions about the different forms of activities (formal and informal) implemented during classes reveal significant findings. One hundred and twenty-one students answered the questionnaire. A great majority of the students (93%) liked being more actively engaged in the class activities than usual; very few of them did not like this possibility, 30.5% would like to be active participants in the classroom on a regular basis, whereas 57.5% of the students prefer this type of work, but only from time to time/periodically.

With regard to the teaching methodology preferences, the results reveal that the students are in favour of the interactive approach, since the majority of them think that either both approaches (interactive and traditional) are equally useful (41.4%), or that the interactive approach is a better option (52.3%). They think that, generally speaking, interactive modes of teaching make the classes more interesting and prevent monotony and boredom, which might be typical of online classrooms. Additionally, they think that the interactive approach facilitates the learning process since it combines students' enthusiasm and teachers' experience and expertise. However, they emphasise that the appropriate teaching methods are selected depending on the subject matter of the course, proving that both approaches can be useful if strategically combined to meet the students' educational needs.

Speaking of the advantages of the interactive teaching approaches, students think that it improves concentration and motivation, creates a feeling of ease, accomplishment and collegiality and enhances self-confidence. Furthermore, it reflects the teacher's creativity

and sensitivity to students' needs. They consider the interactive approach to be an attempt to bring online classes as close to in-person classes as possible. They also think that this encourages critical thinking and offers the opportunity to share different opinions on relevant topics. Having in mind that interactive classes are specifically designed for distance learning, number of students underline that they are able to relax and deal with stage fright when among colleagues whom they had never met in person. Some students argue that the interactive classes are a better option because they reduce anxiety, which might be related to the familiarity of the settings in which these classes take place.

On the other hand, those students who do not support active participation in the class activities listed some disadvantages that the interactive approach might have. For example, they think that it is more stressful, puts them under pressure and creates a feeling of discomfort since the attention of the group is often directed to one particular student at a time. Frequently, students experience anxiety and fear when giving answers, and they are afraid of being mocked if they make a mistake. Some respondents point to technical issues, like poor internet connection, background or digital noise, which physically prevent them from actively taking part in the class activities.

With regard to the informal activities tested, a great majority of the students (93%) support the idea of introducing short stress reducing and well-being promoting activities in classes. Additionally, they suggest alternative methods and approaches, which, according to them, might contribute to better motivation and overall well-being in times of pandemic and in a distance learning environment. For example, they propose occasional discussions of current topics that are not related to the course material and engagement in physical exercises or deep breathing exercises during the breaks in between classes in order to stay fit. They also propose listening to music during classes, which might help them relax. Furthermore, they would like to be able to engage in team-work activities more often since they offer an opportunity for greater solidarity and spontaneous communication among fellow students. They also think that it would be beneficial to reduce the course duration in order to minimise the time spent in front of the screens, which creates fatigue and exhaustion. According to them, the teachers should show support and empathy at all times and refrain from judging or discouraging them even when their achievements are lower than expected.

9. DISCUSSION AND CONCLUSION

The COVID-19 pandemic has brought enormous changes in daily life, including changes in education, teaching and learning. These abrupt changes required quick adaptation to the new circumstances and dealing not only with the immediate pandemic-related restrictions, but also with the psychological burden of living and working in an unprecedented evolving environment. This paper addressed possible solutions to tackling these challenges in higher education. More specifically, it presented the findings of a pilot project on psychosocial support to teachers and students in the setting of the online language and translation classroom. The intervention involved providing teachers with the tools necessary to care about themselves and promote their own well-being and thereby empowering them to assist students to face the new teaching and learning environment in better and more productive ways. The answers were sought by piloting the intervention and then by pooling participants' opinions and experiences thereof.

With regard to the teacher-focused component of the intervention, the analysis has shown the intervention benefits teachers' personal and professional well-being to a great extent. A large majority of teachers think that the self-care component has had a positive impact on their overall well-being and, based on their experience, they would recommend such activities to other colleagues. They identify deep breathing, visualisation of one's safe place and daily rituals as the most useful self-care and well-being techniques.

With regard to the student-centred component, both teachers and students prefer interactive teaching methodologies where students are actively involved in teaching and learning activities in class, thereby shaping their learning experience. Likewise, both teachers and students consider informal activities that relieve stress and create a more relaxing class atmosphere to be beneficial for learning. Overall, students like the teachers' introducing or practicing participative teaching methods for both formal (curriculum-related) and informal (curriculum-unrelated) content.

The far-reaching effects of COVID-19 pandemic have demonstrated the importance of holistic student support for managing the short-term adjustments and the long-term implications of the pandemic (Naidoo and Cartwright 2020: 11). Our study, too, has shown that holistic approaches are highly beneficial to both teachers and students.

According to Bensalah et al. (2001: 8), emergency education programmes are a response to exceptional crisis conditions and as such require exceptional means of response, linked to a process of planning for future educational development. The experience of the COVID-19 emergency and its impact on teachers and students can be used as a basis to plan future interventions in the higher education curriculum. Educational policies should be reviewed to accommodate for drastic changes in teaching and learning, especially during and after COVID-19 (Mbunge et al. 2020), not only in providing the adequate IT infrastructure, and teaching and learning methodologies, but also opportunities for addressing teachers and students mental health needs. Our study has proved that this is necessary indeed.

In times of crisis "educators everywhere bear a moral imperative to provide opportunities for children to reclaim hope, reintegrate socially, learn well, reflect deeply, and act justly" (Hill 2005: 155). Schools should foster resiliency by developing resourcefulness, ability to attract and use adult support, curiosity and intellectual mastery, compassion, ability to conceptualise, conviction of one's right to survive, ability to remember and invoke images of good and sustaining figures, a goal to live for, the need and ability to help others and an affective repertory (ibid: 162-163). Teachers can help by both providing a safe context and by setting a positive example (Halstead & Affouneh 2006: 212). Our project has demonstrated that it is possible to do this in the language and translation classroom and that both teachers and students welcome it. We leave it to future studies to investigate it further in different contexts and to different degrees.

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Review research paper

USING THE ‘NOTICE-THE-GAP’ PRINCIPLE IN L1 TO L2 LEARNING IN TRANSLATION-ORIENTED FOREIGN LANGUAGE TEACHING

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Abstract. *Nowadays, translation into a foreign language (L2) has become a widespread practice. However, this type of translation is known to be more challenging than translation into the mother tongue (L1). This suggests that translation-oriented foreign language teaching should be geared towards equipping learners with the necessary knowledge, skills and abilities for performing L2 translation. One such aspect is creating a meaningful link between L1 and L2 equivalents and ensuring better retention, recall and retrieval of L2 vocabulary in response to L1 equivalents. The aim of this study was to test whether using L1 to L2 learning in combination with the ‘notice-the-gap’ principle in teaching vocabulary to trainee translators can facilitate the achievement of this result. The participants were thirty 3rd-year full-time translation students enrolled on a 5-year translation training programme at the Linguistics University of Nizhny Novgorod, Russia. The proposed approach was used in teaching vocabulary to an experimental group of students whose results before and after the treatment were compared with those of a control group using statistical tests. The results testify to the effectiveness of the proposed approach. The experimental group demonstrated a significant reduction in the performance time in L2 translation accompanied by improved accuracy of L2 use, i.e., retrieval of appropriate and adequate L2 vocabulary in response to their L1 equivalents. The findings have significant implications for translation-oriented foreign language teaching in terms of highlighting the importance of strengthening the L1 to L2 lexical link. On a practical level, the study provides specific recommendations and a learning procedure for achieving this aim.*

Key words: *L2 translation, translation-oriented foreign language teaching, L1 to L2 learning direction, ‘notice-the-gap’ principle*

1. INTRODUCTION

Nowadays, in many contexts translators must be able to work into their L2 as well as into their L1. It is an acknowledged fact that translation into L2 has become a ‘normal and widespread’ activity (Campbell, 1998; Pokorn, 2016), especially with ‘minor’ languages (McAlester, 1992) and in multilingual communities.

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However, translation into L2 seems to be more challenging as research has demonstrated slower translation latencies and lower translation accuracy for the L1 to L2 direction (Kroll & Stewart, 1994). As stated in the Revised Hierarchical Model (Kroll & Stewart, 1994), the L1 to L2 lexical link in the mental lexicon tends to be weaker than the L2 to L1 link because L2 words are acquired by associating them with and mapping them onto their L1 equivalents. Even though this asymmetry may diminish with the increase in the learner's L2 proficiency (Kroll & Sunderman, 2003), it does not disappear completely.

In view of the above, foreign language training in translation and interpreting programmes should cater to students' future professional needs and be geared towards ensuring involvement of both the L1 to L2 and the L2 to L1 lexical links. However, it is often the case that learners successfully master L2 vocabulary but fail to promptly retrieve the target L2 vocabulary items in response to their L1 equivalents. We suppose that one of the ways to address this problem is to use the L1 to L2 learning direction in combination with the 'notice-the-gap' principle.

Despite controversy surrounding the use of L1 in an EFL classroom, there is evidence to suggest that L2 to L1 learning can be beneficial in that it (a) strengthens the L1 to L2 lexical link in the mental lexicon; (b) helps learners to make a conscious link between L1 and L2; (c) raises learners' awareness of crosslingual similarities and differences; (d) enhances L2 vocabulary retention, recall and retrieval.

As regards 'noticing the gap', it involves learners consciously noticing the mismatch between their own production in L2 and correct use of the target language in the input (Schmidt, 2001; Schmidt & Frota, 1986). In terms of vocabulary acquisition, it (a) draws learners' attention to gaps in their L2 knowledge; (b) makes them more motivated, focused and sensitive to the units of L2 language in the input; (c) promotes attention to form; (d) prompts the internalization of linguistic items; e) leads to learners restructuring their L2 knowledge.

To date, there has been no detailed investigation of the use of the above-mentioned approaches in teaching foreign languages to trainee translators. However, we believe that a combination of these approaches could significantly contribute to solving the problem identified earlier. Thus, we hypothesize that using L1 to L2 learning in combination with the 'notice-the-gap' principle in teaching vocabulary to trainee translators can result in creating a more meaningful link between L1 and L2 equivalents and ensuring better retention, recall and retrieval of L2 vocabulary in response to L1 equivalents.

2. THEORETICAL BACKGROUND

2.1. L1 to L2 learning

The L1 to L2 learning direction uses L1 units of language as stimuli while their correspondences in L2 are seen as target units. There is no consensus regarding the effectiveness of this learning direction. However, research has shown that compared to L2 to L1 learning it has demonstrated a superior learning effect (Webb, 2009), and is more effective in the longer term (Schneider, Healy & Bourne, 2002) and for higher-proficiency learners (Terai, 2021).

Indeed, the L1 to L2 learning direction is associated with a number of benefits for L2 acquisition. Firstly, it strengthens the L1 to L2 lexical link in the mental lexicon. Secondly, it creates an opportunity to raise learners' awareness of crosslingual similarities and differences

and to make a conscious link between L1 and L2. Thirdly, this direction involves translation into L2 which is successfully used in teaching English for general as well as specific purposes (Čarapić, 2022), and has been proven to:

- (a) enhance L2 vocabulary acquisition and retention as it activates deeper levels of cognitive processing (Hayati & Mohammadi, 2009);
- (b) ensure better recall (Lotto & De Groot, 1998);
- (c) help learners to make a conscious link between L1 and L2 and ensure retention of L1 and L2 vocabulary items as translation equivalents;
- (d) be useful in diagnosing students' language competences (Popović Pecić, Vlahović, 2021);
- (e) highlight aspects of learners' L2 knowledge that require additional attention (Popović Pecić, Vlahović, 2021).

Another benefit is that the L1 to L2 learning direction creates a higher cognitive demand because retrieving the L2 equivalent of an L1 vocabulary item is a more challenging task and according to the retrieval effort hypothesis more difficult retrieval leads to better retention (Pyc & Rawson, 2009). Besides, it creates favourable conditions for a more effective retrieval of L2 items in response to L1 stimuli. As it follows from Tulving's encoding specificity principle (Tulving & Thomson, 1973), successful recall depends on the similarity of cues in the learning and the recall situations. Finally, it makes learners cognitively involved and provides a higher degree of task involvement which, as stated by Laufer and Hulstijn in their Involvement Load Hypothesis (Laufer & Hulstijn, 2001), also leads to higher vocabulary retention and better recall. We hypothesize that this can be achieved by using the 'notice-the-gap' principle.

2.2. Noticing in SLA

Noticing is one of the general psychological processes which contribute to the retention of words (Nation, 2001b), is seen by many researchers as "the gateway to subsequent learning" (Batstone, 1994, p. 100). It may be defined as "conscious registration of the occurrence of some event" (Schmidt, 1995: 29), and involves the learner paying attention and attending to specific units of the target language in the input.

According to the Noticing Hypothesis (Schmidt, 1990, 1995, 2001), noticing ensures that input becomes intake as it: (a) promotes attention to form; (b) contributes to the mapping of forms with their meanings; (c) makes 'noticed' units of language available for further processing (Schmidt, 1990); (d) prompts the immediate internalization of linguistic items (Iwanaka & Takatsuka, 2007); (e) helps learners to develop the ability to use linguistic items on their own (Iwanaka & Takatsuka, 2007). As evidenced by research, the absence of noticing on the part of the learner can render factors such as frequency of a language form in the input or teacher's corrective feedback ineffective (Schmidt & Frota, 1986).

2.3. Noticing the gap

For noticing to be conducive to learning it should involve learners consciously 'noticing the gap' between their own production in L2 and correct use of the target language in the input (Schmidt & Frota, 1986). This process is based on comparison and identification of a mismatch which can be achieved through intentionally directing learners' attention to specific units of language (Schmidt, 2001).

This can be done by creating a problem situation which highlights a gap in learners' L2 knowledge. Research has proven that it is a need to close a gap in knowledge that leads to learning, rather than simple exposure to input (Ellis, 1994), because 'realizing a problem triggers form-noticing' (Iwanaka & Takatsuka, 2007: 25), i.e., students will pay more attention to the input in an attempt to solve the problem.

One of the ways to create a 'problem' is through output. Output is seen by many researchers as an important factor in L2 acquisition (Izumi, 2002), due to its ability to promote noticing (Swain & Lapkin, 1995). The need to produce output: (a) forces learners to pay more attention to the linguistic means they need to express an idea; (b) highlights the gap in learners' knowledge, and (c) encourages the process of 'hypothesis formulation' (Swain, 1995). This, in turn, alters the way learners process subsequent input (Izumi & Bigelow, 2000). They:

- (a) examine the input with more focused attention;
- (b) are more motivated in their search which improves vocabulary retention (Laufer & Hulstijn, 2001);
- (c) engage bottom-up processes which are not necessarily activated in comprehension and communicative activities (Thornbury, 1997);
- (d) are predisposed to look out for specific units of language based on the gap in their knowledge;
- (e) compare their existing interlanguage with the native-like language which forces learners to restructure their linguistic knowledge (Thornbury, 1997);
- (f) are engaged as active participants in the learning process which makes it more effective (Johnson, 1988).

Overall, exposing learners to target language after attempts to produce it, rather than providing models of language use in the first place, seems to be a more effective strategy – it has "greater psychological validity" (Johnson, 1988), as it involves a conscious effort to figure out how to say things which is more effective than simply learning vocabulary from texts (De Souza, 1959).

Developing the ability to notice the gap between the target language and their own interlanguage is especially important for advanced learners because they tend to:

- (a) pay less attention to such mismatches due to increased self-confidence (Shin, 2010);
- (b) ignore unfamiliar words if they are not essential for the understanding of the text (Keating, 2008; Kim, 2011).

3. METHODOLOGY

3.1. Participants

The participants were two groups of 3rd year full-time translation students enrolled on a 5-year translation training programme at the Linguistics University of Nizhny Novgorod, Russia with English as their L2 language and Russian as their native/L1 language. The groups included 14 (Group 1) and 16 (Group 2) students (30 overall) with comparable L2 proficiency; the students ranged in age from 19 to 20. The number of students in each group was determined by the student population on the programme and was not manipulated by us in any way.

3.2. Research design

Both groups followed the same syllabus for the 'English as a major foreign language' course which is divided into several vocabulary units. While we used the traditional L2 to L1 learning with both groups when teaching Unit 1, Unit 2 was taught differently. Group 1 (experimental group) followed the L1 to L2 learning direction in accordance with our hypothesis, while Group 2 (control group) followed the traditional L2 to L1 approach. We proceeded as follows:

- (1) before reading the text, students were given sentences in their L1 containing L1 equivalents of target vocabulary items from this text (the items were italicized), the vocabulary items included single words or word combinations;
- (2) students were asked to render these sentences into English (their L2); at this stage students were not allowed to use dictionaries;
- (3) alternatives for rendering the ideas expressed by the unfamiliar vocabulary items were brainstormed and discussed;
- (4) students read the text paying special attention to the L2 vocabulary used to render the ideas discussed in step (3);
- (5) students matched L1 and L2 vocabulary items and wrote them down as pairs;
- (6) students used L2 vocabulary from the text to render the sentences from step (1) into English;
- (7) students compared their initial renditions with those given after reading the text.

When preparing materials for the task we proceeded from the assumption that:

- (a) medium-sized texts are preferable (\approx 550-800 words), as using long texts may take too much of classroom time;
- (b) the number of vocabulary units to be practiced in each particular case should not be overwhelming (\approx 10-15), and depending on the length and complexity of the text.

It is essential that the teacher ensures that the students understand the aims of the task as well as the logic and principles it is based on and the benefits it entails for their language training as future translators. Our learning procedure is consistent with Ellis's assumption that vocabulary retention requires the learner to: (a) notice it in the input; (b) compare it with the learner's typical output; and (c) integrate it into the learner's interlanguage (Ellis, 1994).

It also has the highest score on the task involvement index based on the Involvement Load Hypothesis (Laufer & Hulstijn, 2001). The hypothesis includes three components – need, search and evaluation – which are marked 0–2 depending on the degree of presence of each component in a given task: the absence is marked as 0, a moderate presence as 1, and a strong presence as 2 (Hulstijn & Laufer, 2001: 544). Each component of our learning procedure gets a maximum of 2, thus giving it the overall score of 6/6.

3.3. Data collection and analysis

This study uses a quantitative approach. To assess the effectiveness of the proposed approach and the validity of our hypothesis a pre-test and a post-test were conducted upon completion of Unit 1 and Unit 2 respectively. Taking into account the data that L2 translation is associated with slower translation latencies and lower translation accuracy, the tests aimed to assess the effectiveness and the speed of recall and retrieval of target L2 vocabulary items in response to their L1 equivalents.

The pre- and post-test followed the same procedure. The participants were given 20 sentences (234 words in the pre-test, 239 words in the post-test) in their L1, containing 36 L1 equivalents of L2 active vocabulary items. Other than that, the sentences did not contain any vocabulary or grammatical structures unfamiliar to the participants. The students were asked to translate the sentences using vocabulary from the texts they had studied. The task was performed orally and the students' responses were recorded. Informed consent was obtained.

To assess the speed of recall and retrieval we recorded the time (in seconds) taken by each student to perform the task. In terms of accuracy of the target L2 vocabulary use, students could get a maximum of 36 points – 1 point for each correct L2 equivalent. For each criterion the standard deviation was calculated and the mean and median values were found for each group of participants. Standard deviation was calculated to show the gap between the highest and the lowest data. As regards the mean and the median, they both measure the central tendency in a set of data. However, while the mean can be affected by values which are too high or too low, the median is not influenced by skewed distribution of data values or outliers. We used both measures to ensure that our measurements are not affected by skewed distribution.

To determine whether the data obtained were statistically significant, we used the Wilcoxon matched-pairs signed rank test to compare the pre-test and post-test performance of Group 1 and the Mann-Whitney U test to compare the post-test results of Group 1 and Group 2. The results are summarised in the tables presented in the following section.

4. RESULTS AND DISCUSSION

The pre-test results (Table 1) show no significant difference between performance of Group 1 and Group 2. As regards Group 2, there is a slightly more significant gap between the highest and the lowest data points for both performance time and accuracy of L2 use, as reflected by the standard deviation. This may suggest a wider variation in the participants' performance due to either slight differences in students' L2 proficiency levels or the character of the topic-related vocabulary. However, the mean and the median values for both groups are quite similar which means that the outliers have no significant influence on the central tendency.

Table 1 Pre-test results

	Group 1 (experimental group)			Group 2 (control group)		
	Standard deviation	Mean	Median	Standard deviation	Mean	Median
Performance time (sec)	75,8	390,9	397,5 (\approx 6,6 min)	111,9	430,7	416 (\approx 6,9 min)
Accuracy of L2 use	1,5	27,2	27,2	2,4	26,9	26,9

Post-test results show significant changes in the performance of the experimental group (Table 2). The performance time has decreased from 397,5 sec to 265 sec (median) while the results for the accuracy of L2 use have improved from 27,2 to 32,9 (median). The mean values are similar or identical to the median. These findings suggest that (a)

recall and retrieval of the target L2 vocabulary items take less time compared to the pre-test; (b) despite the reduction in performance time the quality of performance has improved resulting in retrieval of appropriate and adequate L2 vocabulary. This may suggest that L2 correspondences were closely associated with their L1 equivalents and were readily available for retrieval. This, in turn, may provide evidence for a stronger and more conscious link between L1 and L2 equivalents.

Moreover, the results seem to be more uniform as the standard deviation for Group 1 has significantly decreased from 75,8 to 52,46. It needs to be mentioned that the standard deviation for the accuracy of L2 use has increased marginally in Group 1 from 1,5 to 1,8 which could have been the result of a slightly wider variation in individual students' results compared to the pre-test. However, this had no significant effect on the mean and median values.

Table 2 Post-test results

	Group 1 (experimental group)			Group 2 (control group)		
	Standard deviation	Mean	Median	Standard deviation	Mean	Median
Performance time (sec)	52,46	267,5	265 (\approx 4,4 min)	97,3	434,6	435 (\approx 7,2 min)
Accuracy of L2 use	1,8	32,9	32,9	2	27,3	27,3

The results for the Wilcoxon matched-pairs signed rank test and the Mann-Whitney U test (Tables 3, 4) are statistically significant at $p < .05$ which suggests that the observed changes are valid and testify to the effectiveness of the proposed approach. More specifically, they provide statistical proof for the: a) improved performance of Group 1 after the practice (Table 3); b) observable differences between post-test performance of Group 1 and Group 2 (Table 4). The fact that the value of W for the accuracy of L2 use is 0 reflects the absence of negative ranks, i.e., none of the participants in Group 1 demonstrated a decrease in the accuracy of L2 use compared to the pre-test results.

Table 3 Comparison of pre- and post-test results of Group 1 (the Wilcoxon matched-pairs signed rank test)

	W-value	Critical value	Result
Performance time	1.5	for W at N = 14 ($p < .05$) – 25	W < critical value result is significant at $p < .05$
Accuracy of L2 use	0	for W at N = 14 ($p < .05$) – 25	W < critical value result is significant at $p < .05$

Table 4 Comparison of the post-test results of Group 1 and Group 2
(the Mann-Whitney U test)

	U-value	Critical value	Result
Performance time	41.5	for U at $p < .05 - 64$	$U < \text{critical value}$ result is significant at $p < .05$
Accuracy of L2 use	5	for U at $p < .05 - 64$	$U < \text{critical value}$ result is significant at $p < .05$

Overall, it can be concluded that the findings illustrate an improvement in the performance of the experimental group (Group 1) which testifies to the fact that the proposed approach to working with L2 vocabulary can ensure its better retention, recall and retrieval in the L1 to L2 direction.

5. CONCLUSION

The aim of this study was to test whether using L1 to L2 learning in combination with the 'notice-the-gap' principle in teaching vocabulary to trainee translators can result in creating a more meaningful link between L1 and L2 equivalents and better retention, recall and retrieval of L2 vocabulary in response to L1 equivalents. Overall, the evidence from this study testifies to the effectiveness of this approach. In particular, the findings suggest that:

(a) after the practice the participants from the experimental group were able to access the correct L2 vocabulary items more easily and in less time than previously;

(b) the L1 equivalents effectively activated the target L2 vocabulary.

Thus, it may be concluded that learning vocabulary through (a) identifying a gap in learners' L2 knowledge by creating a need to render into L2 certain ideas expressed in L1; (b) filling this gap by consciously looking out for the corresponding units of language in L2 input; (c) integrating new L2 vocabulary items into students' interlanguage can contribute to establishing a stronger and more conscious link between L1 and L2 thus ensuring faster recall and retrieval of L2 linguistic means in the L2 translation. In the translator training context this can be essential as translators need to be able to operate out of their L1.

However, there are some considerations to take into account. Firstly, this can mean additional adjustments, changes, or modifications on the part of the teacher. The implementation of the proposed approach will require certain changes to the teaching process and lesson planning, as well as development of new teaching and learning materials. On the one hand, this can make additional demands on teachers' time. Besides, introducing new teaching techniques often means discomfort and unexpected situations in the classroom which will have to be dealt with. It can also lead to disruptions in lesson plans or require deviations from them as new tasks may take more time than expected.

One more consideration is related to the learning procedure itself. Students may try to skip steps 2 and 3 which involve attempts to render L1 sentences into English and discussion of the possible renditions and go straight to step 4 in order to simply find in the text the L2 equivalents for the L1 vocabulary items. However, it is noteworthy that the mental effort involved in figuring out how to say things before being exposed to the target language in the

L2 input is a valuable element of the task, so care should be taken to ensure that students follow all the steps of the procedure.

In addition, learners' attitude may be of concern. Students may be unwilling to give up traditional learning procedures in favour of a new one which is (a) unfamiliar; (b) may require a higher level of effort; (c) will require time to master; (d) may yield disappointing results due to lack of prior experience.

This study may be subject to the following limitations. First, a larger sample could have been used to ensure more representative results. Second, quantitative approach could have been supplemented with collection and analysis of qualitative data (e.g., student survey) to gain a better insight into the benefits and difficulties associated with the proposed approach.

Further research could focus on overcoming the above-mentioned limitations in order to provide a comprehensive understanding of the issue under discussion.

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Review research paper

APPLICATION AND COMBINATION OF DIFFERENT FOREIGN LANGUAGE TEACHING METHODS IN ESP CLASSROOM

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Abstract. *English for Specific Purposes (ESP) being separate branch of the English Language requires specific approach during the process of teaching. Application of right methodology of teaching is very important for successful ESP teaching, therefore correct selection and combination of different foreign language teaching methods are crucial to ensure that the required results are achieved in the ESP classroom. When working in the ESP classroom ESP teachers base their teaching approach on the principle: “English for Specialty” rather than on the principle: “Specialty in English” the approach characteristic of Content and Language Integrated Learning (CLIL). In our paper we are going to discuss the ways of efficient combination of Grammar-Translation method and Audio-Lingual method using ESP textbooks and materials and also development of listening and speaking skills of ESP learners through different subject videos selected on the basis of linguistic abilities and knowledge of specific terminology by ESP learners. Some of these videos are available on YouTube and other internet platforms. Elements of CLIL approach that imply complete immersion into language and subject matter can be applied in ESP classroom. Their combination with the above-mentioned foreign language teaching methods is possible, especially in those groups of ESP learners whose level of General English is B2 and higher. The parallel can be made between CLIL in ESP teaching environment and Direct method of foreign language teaching in General English teaching environment. In this way we compare partial application of CLIL approach in the ESP classroom to the Direct method of foreign language teaching when it refers to teaching of General English. The main aim of our paper is to consider combination of the following foreign language teaching methods and the methodology of CLIL as the most suitable and efficient way of teaching English for Specific Purposes in the classroom:*

- 1) *Grammar-Translation method;*
- 2) *Audio-Lingual method;*
- 3) *Direct method with elements of CLIL approach when applied in the ESP classroom.*

Key words: *English for Specific Purposes (ESP), Foreign Language Teaching Methods, Content and Language Integrated Learning (CLIL)*

1. INTRODUCTION

The aim of the present work is to consider the most efficient ways of teaching the courses of English language designed for different specialties known as English for Specific Purposes or ESP. The combination of different methods, such as, Grammar-Translation, Audio-Lingual and Direct method is offered in the present article to reach the above-mentioned objective. Alongside classic ESP approach, we offer integration of Audio-Lingual language teaching method into ESP classroom. In order to reach the goal stated in the present paper and offer optimum methodology for ESP classroom, it would be expedient to add classes comprising CLIL approach to general ESP classroom.

In the present article we will try to compare classic ESP approach to CLIL approach within ESP classroom. The main point of this comparison is the fact that we are not going to offer replacement of either of these methods with one another, but rather we will be focused on using methodology of CLIL as a complement to general ESP methodology to make studies process in ESP classroom more efficient. In our article we underline the fact that adding elements of CLIL to ESP classroom would help integrating elements of Direct method of foreign language teaching to such specific sphere as ESP environment. Another advantage of applying CLIL method in ESP classroom would be the fact that this method would enable students to acquire those language skills that can be rendered mainly through methodology of CLIL.

2. MAIN BODY OF THE ARTICLE

2.1. Towards Essence of ESP

Since the present article is devoted to English for Specific Purposes and consideration of application of different foreign language teaching methods in ESP classroom, we think it to be expedient to discuss the essence of ESP before we start discussing our proposal of application and combination of different foreign language teaching methods to teach courses of English for Specific Purposes in the most efficient way.

In our article “Towards Various Aspects of Teaching Language for Specific Purposes at Higher Education Institutions” (Tenieshvili 2018) we have already addressed this issue in the following way: “It is very important to understand the essence of ESP, which was referred to as “approach and not a product” by Hutchinson&Waters (Hurchinaon&Waters 1987). Kaosar says that “approach to process of study and teaching ESP course should be based on the statement “ESP – is English for the profession but not the Profession in English”. Such approach is very important as very often ESP learners and higher education institutions’ stakeholders believe that students should be taught specific phenomena related to their future profession in ESP course. In reality it is just course of English for the profession as it was fairly observed by Kaosar (Kaosar 2014). ESP is not just a language course as General English courses usually are, it is more training in English for certain profession. Usually, ESP is recognized as course of English with specific aim to teach English for certain profession. Therefore, specific language is always considered from the viewpoints of general language criteria. Specific language is just general English containing terminology of the specific field. ESP can also be considered as a cross point of technical field and linguistics. In spite of its specific nature, ESP is still a language course; therefore, it is definitely part of linguistics.

Brieger, as cited by McDonough, distinguishes four types of knowledge underpinning most ESP courses:

- General language knowledge
- Specialist language knowledge
- General communication skills
- Professional communication skills [Master, p.472]" (Tenieshvili 2018).

As it was stated by N. Stojkovic and M. Alhasani in their article "Searching for the Golden Average between ESP and CLIL" one most contemporary definition of ESP is offered by the working group called by the Director General for Education Culture of European Commission in spring 2010. The main aim of this working group was focusing on language competence for occupational purposes having implications for all educational and adult tertiary level in particular. They define Language for Specific Purposes as "a teaching method designed to meet specific (mainly professional) needs of the learners. For that reason, according to this source, ESP always integrates the language learning and subject learning approaches. Great emphasis is put on the practical outputs of language learning". ESP learning is not the language learning itself but it is the purpose. Moreover, the purpose is not the linguistic skills, but the function and the notion. To quote the authors, "Every one of the specialized needs required, before it can be met by appropriate teaching materials, detailed studies of restricted languages and special registers carried out on the basis of large samples of the language used by the particular persons concerned" (M. Alhasani, N. Stojkovic 2017).

ESP as a branch of teaching English as a foreign language was formed in the second half of the XX century. The formation of ESP was conditioned by economic growth of certain English-speaking countries. According to opinion of Hutchinson and Waters expressed in their book "English for Specific Purposes: A Learning-Centered Approach: "This development was accelerated by the Oil Crises of the early 1970s, which resulted in a massive flow of funds and Western expertise into the oil-rich countries. English suddenly became big business and commercial pressures began to exert influence. Time and money constraints created a need for cost-effective courses with clearly defined goals" (Hutchinson&Waters 1987). As mentioned earlier due to relevance of ESP to the needs of modern world conditioned by scientific and technical progress of the second half of XX century, ESP has been formed as a separate part of EFL although initially it represented specific language and terminology characteristic of certain specific field.

Since ESP course has clearly defined goals, we have to identify objectives of ESP course first at least on general level. They are: to teach English for specialties to the students, to teach terminology, to ensure ability of ESP learners to speak and communicate, and even think in English within the scope of their specialties, to ensure students' ability to read materials, textbooks, books, specific publications such as manuals, instructions and relevant internet resources related to their specialties, and also to ensure opportunity of effective development of life-long learning (LLL) skills in the students within the scope of their future specialty.

As it has already been mentioned, in order to reach the above-mentioned objectives of ESP courses, we offer to combine application of Grammar-Translation, Audio-Lingual and CLIL methods as a means of teaching and effective way for achieving all above-mentioned goals. Then the following question would arise: How can these objectives be reached and what role each method is supposed to play in ESP teaching process. I would

advise to consider the role and contribution of the teaching methodologies from the viewpoint of four basic foreign language acquisition skills (Reading, Listening, Speaking and Writing):

- Grammar-Translation method being a quite traditional method of foreign language teaching teaches vocabulary, terminology, and has an impact on development of such basic language skills as Reading and Writing;
- Audio-Lingual method develops listening skills. These skills could become basis that would enable the teacher to practice the speaking skills with students too;
- CLIL method ensures immersion and stimulates for development of universal way of thinking especially within one particular field so that the students are able to communicate and establish effective professional communication with colleagues on the international level in the future. In addition to it, CLIL method to a certain degree would contribute to development of all four language acquisition skills: Reading, Listening, Speaking and Writing. Application of CLIL method would help to develop LLL skills in ESP learners.

2.2. Combination of Foreign Language Teaching Methods Used in ESP Classroom

2.2.1. Grammar-Translation, Audio-Lingual Methods

The main aim of our present work is to offer combination of three foreign language teaching methods in ESP classroom. We decided to consider such combination as there are a lot of speculations on account of ESP methodology, the majority of which results in the opinion that there is no specific ESP methodology and that ESP can be viewed just as combination of General English language and specific terminology of the relevant field. In this respect, the importance of good knowledge of General English for successful acquisition of any ESP course should be taken into consideration. Although the matter of existence of ESP methodology per se is an issue of argument, the interesting point about methodology of ESP (if such exists) is that ESP professionals are able to acquire new branch of ESP much easier than language professionals without any expertise in the field of ESP. Maybe one of the reasons for this is the fact that language professionals specialized in certain fields of language for specific purposes are very well aware that any ESP branch is combination of General English and relevant terminology of the field. Consequently, the acquisition of terminology of some particular fields, to some extent, guarantees that language professional specialized in one particular ESP field will be able to switch to another ESP field much easier than language professional with previous experience only in General English.

When considering ESP in terms of teaching methodology used in ESP classroom, the following question arises: “Is ESP only a combination of General English and terminology of specific field, or maybe there exists certain ESP methodology, or a combination of foreign language teaching methods offered in the present article can be considered to be ESP methodology?”. English for Specific Purposes (ESP) being a separate branch of the English Language requires specific approach during teaching process. Application of right methodology of teaching is very important for successful ESP teaching, therefore correct selection and combination of different foreign language teaching methods are crucial to ensure that the required results are achieved in the ESP classroom.

Thus, in the present work we decided to focus on discussion of the ways of efficient combination of Grammar-Translation method and Audio-Lingual method using ESP

textbooks and materials and also development of listening and speaking skills of ESP learners through different subject videos selected on basis of linguistic abilities and knowledge of specific terminology by ESP learners. Some of these videos are available on YouTube and other internet platforms.

In order to consider such phenomenon as ESP that is aimed at reaching balance in teaching ESP course so that students are able to apply their knowledge both in professional and academic situations, it would be expedient to determine more specific aims and goals of any ESP course.

In our opinion, the major goals of any ESP course should be stated as follows:

1. To teach reading of specific texts within the field of future specialty;
2. To teach listening and understanding of complicated professional discourse in written and verbal form;
3. To teach students how to express professional ideas and communicate to colleagues from other countries;
4. To teach communication of ideas in written form on academic level;
5. To prepare students for academic work in relevant professional field in the future;
6. To give foundation for further development of Life-Long Learning (LLL) skills.

Thus, the main aim of our report is to consider a combination of the following foreign language teaching methods and the methodology of Content and Language Integrated Learning (CLIL) as the most suitable and efficient way of teaching English for Specific Purposes in the classroom: Grammar-Translation method; Audio-Lingual method; Direct method with elements of CLIL approach when applied in the ESP classroom. In our opinion, application of different foreign language methods in ESP classroom would contribute to increasing motivation and interest of the students to ESP course because of their interest towards their future specialties.

Here it is relevant to underline the essence of ESP and remember that when working in ESP classroom ESP teachers should base their teaching approach on the principle “English for Specialty”, rather than on the principle “Specialty in English” the approach that is characteristic of Content and Language Integrated Learning (CLIL).

It is a well-known fact that successful teaching of ESP course is dependent on certain preconditions like: needs analysis, syllabus design, materials design. Only after language professionals responsible for teaching ESP course in cooperation with specialists of the relevant field carry out analysis and determine the goals of ESP course on the basis of needs analysis, they will be able to design appropriate ESP syllabus, select relevant ESP materials and even design such materials themselves if such necessity arises. One of the most important things is also admission and selection of candidates for ESP course that should be conducted on basis of knowledge of General English. It is very important to select ESP learners who possess at least B1 level of English to be able to acquire ESP course on the proper level.

According to Biswanandan Dash: “The higher education system should understand which aspects of employability skills are most needed by graduates”. In our opinion, it is necessary to establish close cooperation with specialists of the field employed in the relevant field on professional level. Some of them may be graduates of the same higher educational institution. It is very important to figure out current demands of the field and close cooperation with professionals involved in the relevant field as cooperation between language specialists and academic specialists of the field when designing ESP syllabus to ensure that this ESP syllabus is really efficient both from linguistic and professional points of view (Biswanandan 2015).

As it has already been mentioned above, one of the visions of ESP is that any ESP course is based on good command of General English to which specific terminology of certain ESP field should be added. Consequently, teaching and learning of vocabulary/terminology represent significant part of ESP acquisition. One of the major aims of any ESP course is teaching and learning terminology of the specific field. Any learning style (visual, aural, kinesthetic, tactile) that is the most suitable for a particular learner should be used to contribute to efficient memorization of terminology and vocabulary items by ESP learners. A. Al Mahmud and A. Kaosar give the following advice: “Bring in new/difficult words step by step. Make the students use good English dictionary and encourage free reading” (A. Al Mahmud & A. Kaosar 2019).

It is important to note that due to its complicated nature and specific character of the goal set in ESP syllabus and before ESP teacher in general, these special courses require very serious approach both from teachers’ and learners’ sides. Generally speaking, the following preconditions should be considered to be a good basis for successful acquisition of ESP course:

- a) Good knowledge of General English (B1);
- b) High motivation;
- c) Good knowledge of subject matter/specialty;
- d) Willingness to spend of a lot of hours on independent work.

As previously mentioned in our paper we are going to discuss the ways of efficient combination of Grammar-Translation method and Audio-Lingual method using ESP textbooks and materials and also development of listening and speaking skills of ESP learners through different subject videos selected on basis of linguistic abilities and knowledge of specific terminology by ESP learners. Different listening tasks could be selected on one and the same topic depending on student’s level of knowledge of English and subject matter. The following videos devoted to such topic as Static Electricity can be set as a sample of videos devoted to one topic but being different from the viewpoint of level of English used in them. Each of these videos can be offered to students on different level of ESP studies taking into consideration level of knowledge of the foreign language and knowledge of their future specialty by ESP learners.

Video I: <https://www.youtube.com/watch?v=yc2-363MIQs&t=35s>;

Video II: <https://www.youtube.com/watch?v=ZQjJc9FQ8dc>;

Video III: <https://www.youtube.com/watch?v=VhWQ-r1LYXY>

As design of effective ESP syllabus is one of the cornerstones of any ESP course, ESP teacher should take the following steps to make it effective: consult language specialists; consult academics subject specialists; consult subject specialists involved in the field on professional level, select right materials and design materials based on needs analysis taking learners’ abilities and interests into consideration.

ESP materials should comprise texts on relevant fields, glossaries of terminology, translation exercises, definitions of terms in English. All these represent components of Grammar-Translation method that is necessary in ESP settings as we have to render specific information to the students by means of relevant texts, we have to teach terminology to the students via these texts, illustrating usage of terminology in the texts and giving equivalents of terms in the native language and also explaining the essence of certain terms by means of their definitions in English language. Being part of Grammar-Translation method translation exercises play vital role in English for Specific Purposes as they train students to express their

ideas in their native language and also in English on the appropriate level within the scope of their future specialty. Since any ESP text requires 100% understanding, in our opinion, translation exercises are a very useful tool for the field of ESP in general. Translation can be singled out as the fifth skill of language learning within ESP context alongside such language skills as: reading, writing, speaking and listening. If ESP learners receive proper training in translation skills they will really be able to master ESP. In our opinion it would be expedient to offer translation exercises on the topic the students have just studied, using more complicated texts, since during written translation students have possibility to refer to dictionaries, consult with the teacher and their peers. Since any ESP course is aimed at enabling ESP learners to work with ESP texts in original, it would be reasonable to offer the same topic to ESP learner in original. Maybe it will not be necessary to require absolute understanding of original texts from the students but even certain percentage of understanding of such texts by ESP learners will tell a lot to the teacher about level of acquisition of this topic by the student and speed of development of ESP skills in the learner. Since texts taught within any ESP course require 100% understanding, translation exercises would teach ESP learners to learn how to reach this understanding with the help of special dictionaries, advice of ESP teacher and field specialists. Translation exercises will teach ESP learners how to express their understanding of ESP texts both in native language and in English. For instance, in the textbook “Practical Course of English for Marine Electrical Engineers” we compiled each topical unit in such a way to include the topic, vocabulary, English definitions of certain terms, translation exercises, listening exercises based on YouTube videos, and we also offered relevant topics in original at the end of each unit to check level of acquisition of certain topic by ESP learners and knowledge of its terminology.

Therefore, in our opinion translation should be viewed as the fifth language skill when discussing ESP and this skill should be placed in line with such language skills as reading, writing, speaking and listening. Adding translation as the fifth skill for ESP course would fully meet the requirements of any ESP course. It is also important to introduce translation exercises gradually moving from less difficult to more difficult texts. It is also very important to integrate authentic original texts of the field into the ESP course as they would contribute to immersion of ESP learners into real working environment. Translation exercises within ESP course would help ESP learners develop skills of independent work contributing to Life-Long Learning (LLL), the practice that would enable them to grow professionally during the whole life.

Integration of Audio-Lingual method in ESP classroom can be reached by adding some listening exercises. The selection of videos on such platform as YouTube or some specific internet-sites relevant for particular ESP field would be of much benefit for ESP learners. Videos should be selected and offered to ESP learners on basis of the topic they have just studied taking into consideration current level of knowledge of the English language by ESP learner. Since one and the same topic can be considered using language of higher register, we suggest to offer not only texts of different levels on one and the same topic but integration of videos of different levels to check development of learners’ ESP skills in the course of time.

2.2.2. Application of CLIL in ESP Classroom

In this section we are going to consider Content and Language Integrated Learning (CLIL) as one of the methods of foreign language teaching to be applied in ESP classroom. Content and Language Integrated Learning being a separate method of teaching special

English to the students can be used as a complement to ESP course. CLIL can be successfully integrated in ESP classroom only if learner has good knowledge of General English (B1) as a basis and certain experience of learning ESP.

Elements of CLIL approach that imply complete immersion into language and subject matter can be applied in ESP classroom. The combination with the above-mentioned foreign language teaching methods is possible, especially in those groups of ESP learners whose level of General English is B2 and higher. The parallel can be made between CLIL in ESP teaching environment and Direct method of foreign language teaching in General English teaching environment. In this way we compare partial application of CLIL approach in the ESP classroom to the Direct method of foreign language teaching when it refers to teaching of General English. According to explanation given in Wikipedia: “Direct method of EFL teaching: The direct method of teaching, which is sometimes called the natural method, and is often (but not exclusively) used in teaching foreign languages, refrains from using the learners’ native language and uses only the target language” (N).

It is worth noting that application of CLIL as a form of direct method in ESP classroom would contribute to development of ESP learners’ speaking skills too. Integration of elements of CLIL in ESP classroom can be beneficial as it would contribute to teaching the students to think within their specialty. This would help to be able to communicate and establish cooperation with their colleagues from other countries on the international level. It is possible as CLIL ensures simultaneous immersion into the subject matter and into the foreign language.

In order to prove this aspect of CLIL influence we would like to refer to Fontanet Gomez who mentions that: “In conversation with stakeholders aims like ‘increasing exposure, increasing practice, increasing language competence’ are formulated regularly, some attention is also paid to the intercultural aspect of having another language in the classroom” (Fontanet-Gomez I., 2013). Consequently, according to the results of the carried-out surveys CLIL students have better communicative skills than EFL students. This is the issue of importance to be taken into consideration as ESP can still be considered as EFL with thematic inclination to specific subjects and field.

The advantages of CLIL have been very well described by N. Kenny in the article “Is there a Specific Method for teaching ESP?”

Claims made for the advantages of courses based on content-based syllabus include that:

- They facilitate comprehension,
- Content makes linguistic form more meaningful
- Content serves on the best basis for teaching the skill areas,
- They address learners needs,
- They allow for integration of the four skills,
- They allow for use of authentic materials (Brinton, Snow and Wesche 1989; Mohan 1986) (p.258) (N. Kenny 2016).

Another question that can be considered of interest within the present topic is: How does the methodology of ESP differ from the methodology of General English (GE)?

ESP contains some elements of CLIL since the texts given in ESP textbooks related to subject are the only way to teach terminology to the students and ensure memorization. In our opinion, Grammar-Translation method plays more significant role in ESP than it does in modern General English (GE) teaching methodologies mainly oriented on rapid development of speaking and listening skills, since there has been “the evolution of language teaching in the past 50 years from a structural grammar system to a communicative approach” (Fontanet-

Gomez I., 2013). Audio-Lingual method can be applied on examples of specific audio materials in which terminology is practiced, and also on basis of professional discussions of the topics between teacher and students, and between students themselves, sometimes even in the form of online debates as it was described in the article of S. Garcia-Sanchez (S. Garcia-Sanchez, A. Gimeno-Sanz, 2022).

Taking into consideration the preliminary conditions necessary for successful acquisition of ESP course, we would recommend division of ESP course into two levels: the basic and the advanced. Consequently, the basic level could be taught within Bachelor's degree program, whereas advanced level of ESP course could be offered to the students within MSc program when students have higher level of knowledge of English and also more profound knowledge of future profession (Tenieshvili 2018). These two factors can become basis for development of new approach to design of ESP courses. If we take Cambridge series of ESP textbooks "English for Professional Use" of any field as an example, we can see that general specific terminology and general specific knowledge could be offered in ESP course for the students of Bachelor level, whereas more specific terminology and texts can be offered to students during later years of studies, and consequently can be taught within the advanced level of ESP course offered during higher level of education (Tenieshvili 2018).

Although in the present article we are not focused on comparison of ESP and CLIL, but rather on application of CLIL method in ESP classroom as a complement, it is still relevant to compare them and define which would have priority if just one of them should be chosen. If we base the comparison of significance of ESP and CLIL courses on ideas expressed by ancient Greek scientist and scholars such as Socrates and Plato who were giving priority to language rather than to content, we would see that ESP course has a priority before CLIL course and can even be considered to be the basis for successful mastering of CLIL course. Since successful acquisition of ESP course is based on good knowledge of General English, the better/deeper this knowledge is, the more the learner can benefit from ESP course. Therefore, in our opinion, CLIL elements can be added as a complement to ESP course to increase its efficiency. Here we would like to add that when mentioning application of CLIL as a complement to ESP classroom, we imply integration of one hour of CLIL class per a week to ESP learning process. The main purpose of such integration would be deepening knowledge and understanding of the topic that has been explained to the students during two hours in traditional ESP environment. The application of CLIL class to ESP classroom would contribute to raising ESP learners' proficiency both from linguistic and professional points of view.

Since both ESP and CLIL approaches are oriented on rendering the content, it would be expedient to refer to opinion of N. Stojkovic and M. Alhasani who address this issue in the best possible way in their article "Searching for the Golden Average between ESP and CLIL" referring to the opinions of ancient Greek scholars: "We argue on the supremacy of language and form regulation versus the substantive content and as such supporting our thesis that clarity and appropriative of linguistic expression comes first" reference. This brings up the most ancient scholastic debate over the inherent irreplaceable role of language use and usage for humanity. Ancient Greek thought will be brought back on scheme to demonstrate that language possession is still the most valuable and distinctive innate human feature and necessity; then knowledge content comes second in line of priorities.

Apart from Aristotle, other founding fathers of Greek philosophy such as Socrates and Plato have made crucial contributions to the debate on importance and supremacy of accurate language versus the content knowledge itself. For instance, Socrates believed that „if a man knew anything, he could give an account (logos) of it to others, he could explain what he knew to others“. If we were to interpret, the core of Socrates“ argument is that knowledge (content) cannot speak up for itself unless the individual is equipped with the language input to reveal and demonstrate that knowledge to others. This statement emphasizes again not only the importance but, above all the supremacy of language command and expressive skills to conduct effective communication compared to possession of subject knowledge; if the latter cannot be transmitted properly and successfully to others then, the act of communication has not been conducted at all” (M. Alhasani, N. Stojkovic 2017).

Although on basis of comparison of language and speech we can see that language has priority, we think that application of elements of CLIL in ESP classroom would be beneficial as it would also contribute to development in the students of the ability to contemplate in English within their specialty. This skill will definitely help them to establish themselves as professionals on the international arena, as both ESP and CLIL are partially designed to reach this objective. We think development of this skill is very important as we completely share the essence of purpose and of value of education expressed by the greatest scientist of XX century Albert Einstein in the following statement: “The value of an education in a liberal arts college is not the learning of many facts but the training of the mind to think something that cannot be learned from textbooks. (N) In this respect, an ESP course with elements of CLIL added to it would be a perfect way to contribute to the development of ESP learners’ ability to think and contemplate in English within scope of their future specialty.

3. CONCLUSION

In the present article we addressed such issue as combination of different foreign language teaching methods (Grammar-Translation, Audio-Lingual, Direct methods) in ESP environment in combination with methodology of CLIL to be used as a complement to ESP course to deepen ESP learners’ language skills and develop ability of students to think and contemplate within the scope of their future specialty. We tried to single out the different impact each of the methods considered has on development of basic foreign language acquisition skills and tried to illustrate importance of translation skills for ESP learners.

Since teaching of any EFL course is aimed at acquisition of main language skills (Reading, Speaking, Listening and Writing), and ESP is considered to be part of EFL, consequently, all foreign language teaching methods: Grammar-Translation, Audio-Lingual and Direct method could be partially applied in ESP classroom to ensure balance and achievement of optimum results. Content and Language Integrated Learning (CLIL) can fulfill the function of Direct method in relation to ESP environment and can also be used as a complement to ESP course for further development of ESP learners’ language skills.

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Review research paper

A SURVEY OF EMI AT THE TERTIARY LEVEL IN THE ARAB GULF: ACHIEVEMENTS AND CHALLENGES

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Abstract. *While an abundance of fossil fuels has helped Gulf Arab countries develop rapidly over the past several decades, governments in the region have invested heavily in education, science, and technology relatively recently as a means to diversify their economies in order to ensure their continued growth. In the process, English, as the perceived language of science and technology, has been adopted as the medium of instruction (EMI) in most tertiary institutions. This paper describes how EMI has developed in these countries and the achievements and challenges to date. Recommendations to address these challenges are also given.*

Key words: *English medium instruction (EMI), science and technology, education, Gulf Arab countries, university, K-12*

1. INTRODUCTION

Gulf Arab countries have developed rapidly over the past several decades thanks, in part, to an abundance of fossil fuels. While fossil fuels have helped the United Arab Emirates (UAE), the Kingdom of Saudi Arabia (KSA) and Kuwait create three of the 10 largest sovereign-wealth funds in the world (Zaher 2020), for example, they, along with other Arab Gulf countries (Bahrain, Oman, and Qatar) have tried, relatively recently, to diversify their economies by focusing on education as a driving force. In the process, a majority of educational institutions throughout the Gulf have adopted English as the medium of instruction (EMI). We describe the development of EMI in these countries, examine how COVID-19 has affected EMI in the region, describe the challenges that have been encountered, and make recommendations to address these challenges.

2. FACTORS CONTRIBUTING TO THE POPULARITY OF EMI IN THE GULF

There are a number of reasons why EMI has become so widespread in the Gulf. On a practical level, given the tremendous linguistic and ethnic diversity found in the Gulf, English has come to serve as a unifying force where individuals from almost every

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country in the world are able to communicate with each other. On a strategic level, these countries have embraced science and technology in their efforts to diversify their economies and governments have adopted EMI because English is perceived as the language of science. English is also given prominence in primary and secondary public school systems to help prepare students for EMI at the tertiary level (Mouhanna 2016). Over the years, there has been an exponential increase in the number of national and international colleges in the region where English is the medium of instruction. For instance, there are over 100 of these institutions in the UAE, approximately 100 in the Saudi Arabia, and 14 in Kuwait. There are also a number of foreign universities with campuses in the Gulf. The medium of instruction in almost all of these higher education institutions is English. In cases where a university has adopted Arabic as the medium of instruction (AMI) instead of English (as in the case of Qatar University), there are compulsory and elective courses aimed at advancing students' English proficiency levels.

There are a variety of reasons why EMI at the tertiary level has become popular globally. Key reason is that universities seek to internationalize in order to attract foreign students and increase revenues (Coleman 2006; Macaro et al. 2018). While this is a factor in the Gulf, there are other reasons why this is occurring in the region. First, governments across the Gulf have adopted policies promoting the employment of their local citizens in both the government and private sectors. In the UAE, for example, Emiratization has increased the importance of English for employment purposes. The same is true in other Gulf countries, including Saudi Arabia where Saudization (officially known as Saudi nationalization scheme) is mandating a shift toward the hiring of more nationals in areas traditionally dominated by foreign workers. Higher education institutions, therefore, are making greater investments in EMI in order to enhance not only students' subject matter content knowledge, but also language and communication skills. Second, EMI is believed to help move students away from the more traditional rote-learning methodology used in AMI by providing students with the skills required to live and work more successfully in a world dominated by English (Mouhanna 2016). Indeed, the employability of graduates is central to the adoption of EMI. For example, it was found that the vast majority of Indian and Chinese graduates were unsuitable for employment in multinational companies as recent as 2005 because of weak spoken English skills (Graddol 2006). Finally, and no less importantly, many universities in the region aspire to become more visible globally by increasing their rankings. This, in most cases, requires a significant increase in publications. Because English is considered the language of research, universities strive to hire more faculty who can publish their research in high-impact international journals (Galloway 2017), all the while helping their students build their content knowledge and develop their English language skills. We briefly describe in the next section some of the factors driving institutions in the region to adopt different pedagogical approaches to EMI.

3. PEDAGOGICAL APPROACHES TO EMI

Belhiah and Elhami (2015) describe two main pedagogical perspectives that inform the implementation of EMI. The first one is communicative language teaching (CTL), which argues that the best way to learn English is by having learners interact with others as often as possible. It is important that communication and interaction take place in

meaningful contexts so that language acquisition is supported. In the context of the Gulf, EMI gives students the opportunity to use English in a variety of communicative settings, from educational interactions with faculty, peers, administrators, and service providers to daily life interactions in shops and entertainment venues. It is, however, important to note the cultural factors play a role in the successful implementation of CTL; not all cultures in the Gulf, for example, allow for assertive, student-centered (Dunnette 2015) and open interaction between genders or disparate ethnic communities, which may limit the extent to which individuals are able to benefit from CTL.

The second approach is content and language integrated learning (CTIL), which is widely used at the primary and secondary level and becoming more common at the tertiary level. CTIL stipulates that courses be run in English with the goal of mastery in the content area together with teaching English language skills. Described by Dearden and Macaro (2016, 456) as “an umbrella term for academic subjects taught through English,” EMI is argued to embrace CTIL due to its incorporation of both content and language learning (Brown and Bradford 2017). Coyle, Holmes, and King (2009) identify four dimensions of CTIL that benefit both teachers and students:

1. Content: Integrating content from across the curriculum through high quality language interaction.
2. Cognition: Engaging learners through creativity, higher order thinking, and knowledge processing.
3. Communication: Using language to learn and mediate ideas, thoughts, and values.
4. Culture: Interpreting and understanding the significance of content and language and their contribution to identity and citizenship.

CTIL often requires collaboration between content and language instructors. This was the case at a science and technology university in Abu Dhabi where Wyatt et al. (2021) found that science and math instructors that teach first-year students reported that their collaboration with English faculty helped them more effectively meet the linguistic needs of students. These findings built on an earlier study (Wyatt et al. 2018) at the same university in which science and math instructors worked closely with English instructors for a semester to deliver lessons involving reading to freshman students in order to help them overcome linguistic barriers. Evidence suggests that such collaboration yielded more engaged and successful students in these courses. Both of these studies demonstrate what Williams, Beachboard, & Bohnin (2016) assert, namely, that content instructors often share the responsibility to develop students’ English language proficiency in addition to their primary task of developing their students’ discipline-specific skills and knowledge. One area in which there has been much discussion concerns ‘which English’ to adopt in the Gulf. Dorsey (2018) notes that due to their early arrival in the UAE, for example, the British played a significant role in making British English widely accepted. The presence of the British Council and its role in language teaching, as well as language testing via IELTS, also contributed to the status of British English in the region. However, Dorsey (2018) also highlights that the number of British expatriates living in the Gulf is significantly lower than a number of other expatriate communities. Indians, for example, make up approximately 50% of the population of the UAE and their presence has impacted the use of English across the country. The increased number of US-affiliated firms in the Emirates has also ensured that the influence of American English is widely felt. One indication of this influence is the decision by the Abu Dhabi

Education Council (ADEC) in 2014 to adopt American English as the standard for English instruction in the public schools (ADEC 2015 in Dorsey 2018).

It is also not uncommon to see US-educated faculty at universities. The profile of faculty across the Gulf, however, suggests that there is a significant mixture of English accents, which may be a challenge for some students. In a study investigating students' perceptions about English accents in Oman, Buckingham (2014), for example, found that students were more at ease with speakers from the UK and native speakers of Arabic. Interestingly, Buckingham (2014) notes that instructors from Anglophone countries constitute a minority of the faculty in university English departments. Our own anecdotal experiences also suggest that students in the UAE prefer to listen to instructors with either a native English accent or an Arabic accent with which they are more familiar.

4. ACHIEVEMENTS AND CHALLENGES

While EMI in the Gulf has received more attention recently, the literature on EMI in the region is still relatively limited. A survey of EMI achievements and challenges in each Gulf country follows.

4.1. United Arab Emirates

Research in the UAE broadly points to positive effects of CLIL-based EMI on students' academic performance. For example, Younes (2016) found that students' overall linguistic proficiency in English improved *pari passu* with content learning. Their written assignments also revealed enhanced lexical dexterity, but concern was noted about students' limited understanding of Arabic, a theme that runs through much of the research on EMI in the Gulf. Belhiah and Elhami (2015) likewise discovered that the CLIL-based EMI approach improved students' listening, speaking, reading, and writing skills in English. However, the improvement was not enough for them to satisfactorily develop their knowledge of the subject.

Interestingly, Mouhanna (2016) found that faculty favored EMI due to its contribution to the internalization of higher education in the country, as well as the utilitarian function English has as a *lingua franca*. At the same time, however, he reports that students' limited language proficiency and inability to effectively engage with the curriculum negatively impacted faculty's academic practices. Indeed, faculty felt obliged to modify their pedagogical practices to cater to the needs of the students and often adapted course content as a result. Aspects of these findings are echoed by Ayish (2020), who found that most students at an engineering university in Abu Dhabi believe they will benefit professionally by developing their English language skills. However, they also feel ambivalent toward studying engineering in English because doing so makes their learning that much more difficult.

4.2. Qatar

In 2002, Qatar instituted EMI in K-12 as part of an educational reform movement. In 2012, however, Arabic was reinstated as the language of instruction in K-12 schools and in social sciences courses at Qatar University because only about 20% of the students were able to meet learning outcomes in math, science, and Arabic during this period.

Mustafawi and Shaaban (2019) found that the negative attitude of stakeholders, the limited English proficiency of many teachers, a lack of preparedness for EMI instruction, and the manner in which reforms were introduced played a role in the unsuccessful implementation of EMI. They suggested that adopting a bilingual system “accord[ing] Arabic the high status it deserves as a mother tongue and [that] gives English a major role in domains that will help Qataris fully participate in the modern world and join a knowledge-rich globalized workforce” is necessary to address the challenge of incorporating EMI at the university level (Mustafawi & Shaaban, 2019, p. 232).

4.3. Saudi Arabia

The language of instruction in Saudi public schools is Arabic, but English is taught as a subject to students beginning in grade 4 (Zumor 2017). Currently, however, a majority of students entering university lack adequate proficiency in English (Al-Nasser, 2015), while a compulsory one-year intensive English study is often not enough to ensure academic success. Not surprisingly, Al Zumor (2019) found that students’ learning of scientific content was affected negatively. Students also revealed that they suffered from stress, anxiety, fear, and embarrassment because they were required to learn through English. As a result, their academic performance decreased. Al Zumor (2019, 74) argues that “EMI deprives the students of their basic rights to effective understanding, communication, interaction, discussion and inquiry”, and recommends “ensuring quality English education in the foundation year and examining the option of “additive bilingual education.” Shamim et al. (2016) say Saudi universities should provide institutional support including a simplified curricular content; however, this, they note, limits the amount of learning taking place during a particularly important stage of university education. The authors contend that the lack of a clear language policy in the country allows the “creeping in” of EMI “through the back door with all its ensuing challenges and adverse effects on students’ learning (44).” They call for an urgent language policy with a clearly stated implementation plan.

4.4. Bahrain

In 2008, Bahrain instituted the Education Reform Project to compel educational institutions to implement advanced technology in order to deliver up-to-date knowledge to students. Instruction was to be given in English. In the same year, Bahrain Teachers College was established to train educators to meet the new requirements and prepare teachers to provide students with advanced skills in English. To achieve this objective, the Educational Leadership Programme was created and adopted EMI to train school leaders and postgraduates. A study investigating students’ perceptions in this programme showed that the participants had an overall positive attitude towards EMI (Al-Wadi 2018); however, they felt they were not fully prepared to take their courses in English. They also felt restrained from engaging in conversations that required them to express their opinions on issues. In addition, students who were administrators in public schools, indicated their EMI experience did not contribute to their ability to fulfil job requirements because Arabic was used in the workplace. They preferred, therefore, to pursue their education in Arabic.

4.5. Oman

English is given political, economic, social, and legislative support in Oman because it is considered a “resource for national development and as a means for wider communication within the international community” (Ministry of Education 1987, as cited in Al-Bakri, 2013, 56).

While Al-Bakri (2013) found that many Omani college students gravitated toward English for pragmatic reasons (e.g., securing better job opportunities), very few students reported that EMI improved their language skills or increased their confidence in their language ability. Indeed, many lacked the requisite linguistic skills to study their subjects effectively, and it was difficult for them to participate in classroom discussions. In addition, students found the university’s new EMI assessments particularly challenging because they were accustomed to rote memorization and simple recall of facts on written exams. As a stopgap, some students indicated that additional support from a language school would help them solve their problems.

More recently, Al-Bakri (2017) investigated students’ development of writing skills in English at an EMI college. He found that the EMI policy adopted at the university often lowered the expectations pertaining to writing skills; the students were only asked to collate information from different sources without careful integration of information to support an argument or critically evaluate the information gathered. In addition, students were not required to produce lengthy term papers, which is typically an important task assigned to university students. These lowered expectations negatively impacted the development of students’ writing skills.

According to Mohammed (2019), the lack of success attained in EMI at the tertiary level can partly be attributed to the K-12 system in the country. It was found that the teachers’ exam-oriented approach to teaching and concern with following a rigid syllabus caused them to rely more on summative assessment rather than formative assessment, which contributed to a disconnect between EMI policy and effective language development.

4.6. Kuwait

Like other diglossic Gulf countries, Kuwait has witnessed English rise in prominence as a lingua franca used in business, daily communication, and schools. However, while a policy to promote the use of EMI in public universities has been in place since the early 1990s, Kuwait has been relatively slow to institute educational reforms that would bring about widespread use of EMI. For example, most public schools use Arabic as the medium of instruction and still teach English as a foreign language for only several 45-minute periods per week (Alazemi 2020). Consequently, students entering tertiary education are ill-prepared to transition to an EMI environment. Part of the challenge, according to Alsafran et al. (2020), is that parents value the idea of their children learning in English, but they perceive EMI as a pre-cursor to cultural, religious, and identity loss. Nonetheless, there has been growing pressure to adopt EMI in government schools, mostly coming from an increase in the number of EMI private schools and universities across the country (Alsafran et al. 2020). Such institutions are perceived as offering a better quality education that is more aligned with the needs of the world economy than what is available in government schools.

5. IMPACT OF THE COVID-19 PANDEMIC ON EMI IN THE GULF

The rapid shift from face-to-face classroom instruction to remote learning (synchronous and asynchronous) during the pandemic affected EMI students and higher education institutions in a number of ways. Some issues that emerged and that were compounded for EMI students in particular due to language and communication challenges include: inequality and inaccessibility to adequate devices and Wi-Fi; inadequacy in content coverage in certain fields including STEM and medicine where hands-on learning and laboratories are essential; lack of quality communication as teacher-student and student-student relationships are difficult to build and sustain online; technical difficulties; issues with instructors' and students' technological literacy; reduction in student engagement; a dependence on recorded lessons; and challenges redesigning content and student performance assessment (Abu Talib et al. 2021).

However, the immediate move to remote learning has presented EMI educators and institutions an opportunity to learn from the challenges and take advantage of the benefits to transform EMI learning. Abu Talib et al. reported that remote learning exposed students and teachers to current and relevant technologies, thus, increasing flexibility for students and faculty, the use of modern communication techniques, and the speed of curriculum reform including updating instructional approaches (2021). Additionally, moving to an online learning format may contribute to students' development of lifelong learning skills. Deveci (2021) explored the effect of the pandemic on first-year undergraduate students' lifelong learning skills at an EMI university in the UAE. The findings showed that their overall lifelong learning scores increased significantly, indicating that students were able to enhance their learning strategies and plans during the pandemic.

6. CONCLUSION AND RECOMMENDATIONS

Implementing EMI in the Gulf has been fraught with challenges. While results have been mixed, several lessons can be drawn from the way countries in the Gulf have instituted EMI. First, it is essential to design context-sensitive EMI curricula by creating engaging material that sufficiently explores content while integrating support for language acquisition and academic literacy. For example, encouraging close collaboration between language and content specialists is necessary in order to develop programs that more effectively address content and language goals (Williams et al. 2016). Second, it is important to recognize the impact that COVID-19 has had on students generally and those attending EMI institutions in particular in order to create a more robust technical infrastructure and training support. For example, it is helpful to consider how a more learner-centered and technology-enhanced blended learning experience can benefit students in EMI settings. Third, aligning policies and practices in the K-12 system can go a long way in helping EMI students at the tertiary level succeed academically. Implementing EMI in the Gulf will likely be that much more successful if these lessons are considered.

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Review research paper

INCORPORATING CRUCIAL TRANSFERRABLE LIFE-LONG SKILLS IN AN UNDERGRADUATE ADVANCED ENGLISH COURSE AT SOUTH EAST EUROPEAN UNIVERSITY

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Abstract. *This paper gives an insight into the practical experience of designing and implementing an Advanced English course offered to first year undergraduate students from all Faculties at South East European University which included a research project as a grading component and resulted in an undergraduate student mock conference. It elaborates on the rationale behind the need for incorporating crucial, transferable, life-long skills that students can put to an immediate use during their undergraduate studies, but also skills they can use long after graduating and leaving SEEU. The paper also offers a detailed account of the practical day-to-day challenges faced by both language teachers and students. The peer- and self-evaluation completed at the end of the course reveal overlooked issues that require more attention, modifications and adaptations in the future.*

Along the way students were made aware of the importance of choosing the most appropriate research method, meticulously citing every source used, distinguishing between editing (as a process that begins as soon as one starts writing) and proofreading (as the activity left for the very end of the writing process when one double or even triple checks that everything is the way it should be before the research report is handed in), and avoiding plagiarism by summarising, paraphrasing and quoting. The Academic skills and research conference offered students practice in giving a well-structured presentation, whereas the follow-up self-evaluation helped them identify areas of possible improvements.

Hopefully, thanks to this long and challenging, but also rewarding process, when asked to conduct research on a certain issue, present the results, draw conclusions and recommend a possible course of action or offer possible solutions, the students' immediate reaction will be: "A-ha, No problem! Been there-done that! I know exactly what I am supposed to do, and I know how to do it!"

Key words: *Advanced English, research, transferrable skills, SEEU*

1. INTRODUCTION

This paper gives an insight into the practical experience of designing and implementing an Advanced English course offered to first year undergraduate students from all Faculties at South East European University in the summer semester of the academic year 2022. The

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course included a group research project as a grading component and resulted in an undergraduate student mock conference. It elaborates on the rationale behind the need for incorporating core, crucial, transferable, life-long academic skills in an otherwise General English course, skills that students can put to an immediate use during their undergraduate studies, but also skills they can use long after graduating and leaving SEEU. The paper also offers a detailed account of the practical day-to-day challenges faced by both language teachers and students. The peer- and self-evaluation completed at the end of the course reveal overlooked issues that require more attention, modifications and adaptations in the future.

2. ADVANCED ENGLISH COURSE SPECIFICS

Generations change, consequently we enrol undergraduate students with high proficiency level of general English, but with a grave lack of academic skills, sadly enough not only in English but in their mother tongues as well. “Graduate recruiters nowadays look for oral communication, teamwork, self-management, problem solving, leadership, etc.” (Marjanovikj-Apostolovski, 2017, p.495) which imposes the necessity for development of a variety of generic, transferrable, life-long skills in Higher education. This calls for re-examination of teaching resources and discovery of new options for engaging students (Kirovska-Simjanoska, 2022).

At the very beginning, during the Advanced English course design and creation process, the leading idea, except for improving students’ overall English proficiency, was to ensure that upon successful completion of the course the students are equipped with crucial, transferrable, life-long skills that they can put to an immediate use during their undergraduate studies, but also skills they can take with them and use long after graduating and leaving SEEU. The main idea behind this course was to ensure that when put in a similar situation - may it be while working on their next seminar paper, answering an essay like exam question, presenting and defending their MA or PhD thesis, or once they get employed - the students would know how to narrow down a broader issue to a specific question, would be able to choose the most appropriate research method, would remember to meticulously note down every single source they have used, that they would remember that editing and proofreading go hand in hand with writing, and last but not least, would develop the habit of never, ever “lifting” other people’s ideas and work and present it as theirs! One of the objectives was to help students develop the habit of using other people’s work only after summarising, paraphrasing and quoting it. Since being able to effectively present the results of a research is as important as doing the research properly, developing effective presentation skills was also included as an inevitable element of this course.

The Academic English Course is a General English course offered to first-year undergraduate students enrolled at different study programs from all faculties at the South East European University whose proficiency level according to the European Framework of Reference for Languages is upper-intermediate and above. It is a one-semester course offered in the summer semester after students have completed a General English course in the winter semester. This Advanced English course was initially offered in the summer semester 2020, when due to the corona outbreak, the final, end product was a poster presentation from students. When the course was offered for the second time in the summer semester 2022, it was taken a level up, and apart from creating posters students were also

asked to prepare a PowerPoint Presentation and give an oral presentation at a mock student conference.

Two parallel but intertwined tracks are incorporated in this course. On one hand it is a General English C1, C1+ course for which the coursebook “*Pioneer*” C1/C1+ by MM Publishing (2017) was used, and a final exam was administered at the end. On the other hand, track 2 of this course is a semester long group Research Project with four outcomes: writing and submitting a research paper, creating a poster presentation, a PowerPoint Presentation and presenting at a student conference.

There were four classes per week or two meetings on weekly basis, one devoted to working with the book and the other focusing on the research project. Students were graded based on the following criteria:

- 30% Final exam (testing reading, grammar and vocabulary presented in the coursebook);
- 10% Debate/Discussion Forum (Think like a researcher!);
- 20% Google Classroom Assignments (summarising, paraphrasing, opinion essay writing and essay summarising two texts);
- 10% Attendance and Active Participation;
- 30% Group Research Project.

As part of the General English track of the course, the main focus was on put on:

- Vocabulary building (mainly through word formation & derivation using prefixes and suffixes);
- Grammar (more refined, context specific forms were introduced and practised, such as mixed conditional, alternative phrases to modal verbs, emphatic forms, unreal past, causative form, etc.);
- Reading (for gist and for detail, appropriate time management);
- Writing (with main focus on writing an opinion essay, essay summarising two texts, essay in which different sources are paraphrased, summarised and quoted).

All these elements covered in the General English track fed directly into Track 2 – the research project. All in all, the General English track of the course equipped students with practical test-taking strategies which is very important since many undergraduate students continue their MA studies abroad for which an official, standardised proficiency test, such as TOEFL or IELTS, is required.

The rest of the paper shall focus more closely on Track 2, the group research project and elaborate on the three main stages of it.

3. GROUP RESEARCH PROJECT

The research project was a group semester-long assignment and a compulsory grading component consisting of three main stages: the pre-conference stage whose main outcome was submitting a written group research paper, the mock student conference stage with three separate outcomes (poster, PPP and an oral presentation) and the post-conference stage during which students were asked to self- and peer- evaluate their learning experience. Using Google Classroom as a learning management tool made all this possible, enabling students to work together at a distance and cooperate out of class but also helping me as a teacher monitor, track and fairly assess students’ work.

3.1. Pre-conference stage

At the very beginning of the course students were put in groups and were asked to distribute the work load by deciding which part of the research paper they would like to work on. Group work of course has its own advantages and drawbacks. On the plus side students get to learn from each other, which promotes autonomous learning, encourages communication, enables students to practice speaking, debating, so on and so forth, and in the end divide the otherwise overwhelming workload. However, on the minus side, it is almost impossible to equally distribute the workload and make sure everyone does their part. On top of that there is the issue of regular class attendance and meeting specified deadlines.

Once the groups were formed and individual tasks assigned within the groups themselves, the very first assignment was to come up with a broad topic of shared interest and describe a problem within it, more precisely specify a still unknown and unresolved issue which requires for an investigation be conducted. Having agreed upon an umbrella topic with aspects worth investigating about, groups were instructed to brainstorm as many different questions as possible, draft a primary research question, and after a group discussion finalise and report the research question. Having formulated the research question, the students were introduced to various research methods (qualitative and quantitative) and were assisted in selecting the most appropriate data collection instrument (questionnaires, interviews, focus group, etc.) for their research question. Throughout the whole process of conducting the primary or field research, and the secondary or desk research on the research question specified, the students were encouraged to develop the habit of meticulously noting down every single source used. The students were then guided, assisted and monitored in processing the data collected and drawing conclusions, recommending solutions and proposing a possible course of action. They also practised editing from the very first draft of the research paper, as well as proofreading at the final stage of the report writing process. Paraphrasing, summarising, quoting and citing sources were also practised along the way as the best way to avoid plagiarism and intentionally or out of ignorance present other people's work as theirs. Alongside the research, students were also introduced to techniques for giving well-structured informative and persuasive speeches by employing appropriate opening techniques in order to grab the audience attention, closing techniques which nicely wrap up the speech and leave the audience with some food for thought, discourse markers which guide the listeners and help them navigate through the content of the speech. Students were also made aware of the importance of body language, use of voice, handling nerves and the audience and employing visual aids to enrich and back up the presentation.

The first major outcome of the research project was a five- to seven- page long research paper consisting of the following 5 sections:

- Introduction (stating the problem & purpose, indicating the significance
- of the study, the research question and hypotheses);
- Methodology (containing details for the target population & sampling
- method used, the main data collecting instrument, and details regarding
- the procedure & time frame);
- Results & findings (a summary of results and findings);
- Conclusions & recommendations (conclusions drawn and
- recommended course of action proposed as a possible, viable);
- References listed in APA style (at the very end of the paper, references
- listed in APA style).

In order to be able to compose a well-structured research paper, in the first stage of the research project the students mainly focused on the following:

- Formulating the research question;
- Selecting the most appropriate research method - quantitative vs qualitative;
- Deciding on the most appropriate data collection instrument (questionnaires, interviews, focus groups);
- Conducting field research (primary or secondary);
- Processing data;
- Drawing conclusions;
- Recommending solutions & proposing a course of action;
- Referencing using APA style (using a citation generator <https://www.scribbr.com/citation/generator/apa/>);
- Editing & proofreading;
- Avoiding plagiarism by summarising, paraphrasing & quoting.

3.2. Conference Stage

Teaching this course gave me a detailed insight into the exact time, effort, energy and enthusiasm that needs to be invested in this kind of a research project. Being a teacher, I witnessed the whole process, closely monitored every step students had taken from the beginning of the semester until the conference itself. However, at the conference, organized at the end of the semester, the time had come for the students themselves to present the fruits of their semester-long hard work publicly.

The student mock conference itself took place on May 27th 2022, and included an introductory, opening panel, followed up by parallel presentation session. In the parallel sessions the students delivered well-structured oral informative and persuasive presentations accompanied by a PowerPoint presentation. They were given 15 minutes for their presentation and 5-10 minutes were spent on follow up questions and discussions. Besides presenting, students were expected to attentively listen to their colleagues presentations and actively participate in the follow up discussions. We, the teachers, were positively surprised by the interaction that took place. We did not really expect any feedback from the audience, so according to the initial plan, we were going to ask some questions or ask for clarification. This, however, turned out to be absolutely not needed, as there were so many comments, questions, and real discussion after each presentation. It was a really positive surprise which gave extra weight and added extra value to the students' semester-long hard work and made the presenters really proud of themselves. The poster presentations were exhibited in the conference hall.

This link takes you to the mock student conference photo gallery: https://docs.google.com/presentation/d/16QSYsgvaVZkOjQAuvmMS1M46XH_j9ay/edit#slide=id.p7

The mock student conference program can be found on the link below:
<https://docs.google.com/document/d/1RXozzpYUeS5Yj48vwLIYzXeCa18jN9DV/edit>

3.3. Post-conference stage

In order to make the most of the presentation at the conference and turn it into another learning opportunity, the students were asked to do one more thing, on top of everything else they had done as part of this research project, after giving a presentation, attentively listening to their colleagues' presentations and taking an active part in the

follow up discussions, they were asked to reflect back on the conference participation experience and take a note of things that worked out exactly as planned, but also take a note of things which did not quite go according to plan, so next time they present they would know what they need to pay more attention to. The reflection on their presentation was an individual assignment guided by the following questions:

Pre-presentation Stage:

- How long did it take you to prepare?
- What problems did you come across while preparing?
- What did you do to try to solve the problems encountered?

Actual Presentation at the Conference:

- Did everything go according to plan?
- What went wrong?
- What did you do?

Lesson Learned:

- If asked to do the same presentation again, what would you do differently next time?
- What did you do well during the presentation that you would repeat next time you present?

Apart from the post-presentation self-evaluation, at the very end of the semester but prior to the final exam, the students were asked to carry out one more round of self-evaluation and peer-evaluation, but this time focusing on the overall research project using google classroom forms.

When evaluating their peers, the students were asked to specify the following for each group member individually:

- Rate the communication with each group member;
- Elaborate on the communication they were involved in;
- Rate their cooperation;
- Elaborate on the cooperation;
- Evaluate their overall work and engagement;
- Estimate the willingness for future collaboration;
- Rate their contribution based on the time and effort invested in the project;
- Give any other remarks and comments.

In order to self-evaluate students were asked to:

- List the tasks performed;
- Rate their own work based on the time and effort invested in the project;
- Specify the success achieved when meeting deadlines for various assignments;
- Describe the lesson learned about working in a group;
- Elaborate on the best lesson learned about doing research.

The Google form questionnaire for self- and peer-evaluation can be found on this link: <https://drive.google.com/drive/u/0/folders/1rMKYAMqh9ID2iNeSUnlQNgO00OgyM1K>

The purpose of the end-of-course self- and peer- evaluations of the overall experience of conducting a research project was multifold. It enabled me as a teacher to grade the students more fairly and get ideas of how to improve the course when offered again in the future. At the same time, it hopefully helped student learn about themselves as learners and team-members.

4. RECOMMENDATIONS

Just as with the mixed overall abilities and writing skills, for some of the students this was the very first experience of being involved in a group project and presenting publicly in front of an audience, while others had already had some experience presenting. However, for all it was a learning experience and that always should be the end goal: turning every possible situation into a teaching moment and a memorable learning experience. This definitely requires reconsidering the decision made at the beginning of the semester to give student the liberty to choose who they would prefer to work with. The rationale behind this decision was the fact that students would understandably choose to work with peers sharing their interests, as well as peers they are studying or commuting with. Fortunately, the endless options for out of class cooperation at a distance Google Classroom, Google Forms and Google Docs offer, compensate for almost all objections students might have when not being given the chance to choose their group mates.

Luckily, throughout the entire semester there was only one major conflict between students within a group which somehow went unnoticed until the penultimate stage of the project, i.e. prior to the presentation at the conference, which was successfully resolved. With an intervention on my part, in the form of an open talk with all group members present discussing the misunderstandings and obvious lack of open communication, luckily the group project was put back on track and finished successfully on time. Students demonstrated maturity and rose above the misunderstandings but also clearly indicated that they would never ever agree to work together on any other similar projects. This made me realise that a single, end-of-course peer-evaluation, regardless how well structured, is not enough for dealing with and solving issues along the way. It is, however, invaluable for offering the course in the future.

Regardless of the fact that the course with the mock student conference as its main outcome had made me as a teacher super-proud, reflecting back on the entire experience and taking into consideration the summary of the results from student evaluations I would propose the following recommendations for possible improvement of this Advanced English Course:

- Conduct a survey at the beginning of the semester and form the groups myself based on students' previous high school experience with writing essays, doing research, working in group projects and presenting in public;
- Perform at least two peer-evaluations (in the middle and at the end of the semester) for improved monitoring of group dynamics, ensuring equal participation and contribution, evaluating cooperation between group members and if required, intervene timely, as well as for more objective and fair assessment;
- Minimise or possibly completely eliminate the General English track of the course and the use of a coursebook in order to focus on the research project only and consequently grade students exclusively on the outcomes of the research project itself.

5. CONCLUSION

Teaching this Advanced English course has been a long and challenging, but at the same time also a rewarding process. All the grades the students got at the end were definitely hard earned ones. The students' hard work, enthusiasm and dedication to the research project have really made me a proud teacher, motivated to offer an improved, upgraded version of the course to the new generation of undergraduate students. It was

and in fact still is, my biggest hope that when these students go out there in the real world and are asked to conduct research on a certain issue, present results, draw conclusions based on those results and recommend a possible course of action or offer possible solutions, their immediate reaction will be: “A-ha, No problem! Been there-done that! Thanks to the Advanced English course I took in semester 2, I know exactly what I am supposed to do, I know what is expected of me and I know how to do it!”

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Review research paper

ESTABLISHING AND MAINTAINING OBJECTIVE CRITERIA IN WRITING AND SPEAKING FEEDBACK STRATEGIES IN EFL

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Abstract. *Writing and speaking are termed productive or active skills due to the fact that learners need to produce language when doing these. As EFL teaching is increasingly becoming more and more oriented toward helping learners develop and improve their communicative competence, it is not surprising that speaking and writing skills are becoming ever-more important. Though it goes without saying that speaking and writing undoubtedly go hand in hand with the receptive skills, reading and listening, EFL learners, and instructors, are, nevertheless, focusing their attention on improving speaking and writing skills. This is why it is so significant that clear and objective criteria is established and provided in the EFL teaching and learning environment, as this criteria will benefit not only the learners, but the teachers as well. As assessment is an integral part of the teaching and learning process, it goes without saying that learners are bound to find themselves receiving some kind of feedback at some point in their acquisition of these skills. However, the issue that arises is the fact that this assessment tends to be seen by many learners as subjective rather than objective, which is not the case with assessing listening and reading comprehension, for example, where it is easier to pinpoint the mistakes. This paper takes a closer look at what this includes, and how it can be done, without disrupting either the teachers’ or the learners’ autonomy, and hence make the whole process that much smoother.*

Key words: *productive skills, receptive skills, feedback, criteria, objectivity*

1. INTRODUCTION

Communicative competence, which is also known as communication skills, refers to the learners’ ability to understand and use language effectively to communicate in authentic social and school environments. Attaining this competence, that is, these skills, is a prerequisite for success in any sphere of life, but it is especially important in foreign language teaching and learning, and, specifically, in the EFL context, as English is undisputedly the lingua franca of the world, and knowing English nowadays is seen not so much as an advantage but, rather, as an essential skill, like possessing literacy and numeracy skills. From early school years until later in life, learning and using English

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either in teaching scenarios or in everyday situations have become usual global citizen's activities (Dincă and Chitez, 2021).

The concept of communicative competence is a broad one and it covers numerous aspects, such as: *linguistic skills*, in terms of understanding and using appropriate vocabulary, various linguistic conventions, such as grammar, punctuation and spelling, as well as syntactic conventions, as in proper sentence structure; *strategic skills*, such as planning for effective communication by being able to make modifications and adjustments bearing in mind the target audience and the overall purpose, being fluent and achieving coherence and cohesion of thoughts and ideas, and being able to overcome various language gaps, all of which are connected to *discourse skills*, in terms of understanding and employing patterns of organization and a variety of discourse markers to achieve smooth transitions and logical and consistent flow of ideas and train of thought; and last, but not least, *socio-linguistic skills*, connected to an awareness of the social rules of language, such as tone and level of formality (register), various non-verbal behaviors, as well as cultural knowledge as illustrated in the appropriate use of idioms and other cultural references.

However, more often than not, EFL learners tend to equate communicative competence with speaking, and sometimes, writing skills, and focus their attention on improving these segments at the expense of all the other aspects. Effective foreign language learning, however, cannot be achieved by focusing simply on one area, as they are all intertwined and go together. This is why it is especially important that learners are made aware of the importance of learning a foreign language by combining all the various competences at hand rather than focusing on specific areas.

Another important aspect of language learning, though by far the least popular, is that of assessment, which allows both the learners and the teachers to see what has been successfully acquired, and what needs further work and practice. The punitive use of assessment is something that will unfortunately always hover in the background; nevertheless, when carried out in a consistent and predictable manner, and predictable in the sense that it is formulaic and anticipated, it will undoubtedly yield much better results and a more positive outlook. This is why it is so vital that teachers provide learners with clear and objective criteria where feedback is concerned, and especially in these areas of speaking and writing, as these are the areas that cause learners the greatest anxiety due to being flagged as being the most overtly subjective where feedback is concerned.

There are numerous feedback strategies that may be employed to make this stage less stressful for the learners, and less time-consuming for the teachers, ultimately making it advantageous for both parties. This is why it is so important to have the learners be as fully engaged as possible in the assessment stage of the learning process, and to provide them with a clear and precise set of objective criteria that will facilitate their role at this point.

2. LITERATURE REVIEW

Providing feedback to learners, no matter what form it comes in, written comments, error correction, teacher-student conferences, or peer discussions, has become accepted as one of the most important aspects of EFL learning (Hyland & Hyland, 2006). Despite the role feedback plays in the EFL context, however, not very many studies have been conducted to directly look into whether EFL students who receive corrective feedback in a given area do improve as compared with those who do not receive such feedback

(Bitchener, Young & Cameron, 2005). Interestingly, most of the studies that have been carried out (for example, Kepner, 1991; Semke, 1984; Sheppard, 1992) report that there is no significant difference in terms of learner improvement.

In this context, we may mention that there are, nevertheless, some studies which have made attempts to investigate this, such as the studies by Lee (1997) and Ferris and Roberts (2001), which did have control groups that received no corrective feedback. Lee's study of EFL college students in Hong Kong, for example, concluded that there was a significant effect for the group whose errors were underlined in comparison with those groups that did not receive any corrective feedback or received only a marginal check.

Ferris and Roberts (2001) also examined the effects of three different feedback treatments (errors marked with codes; errors underlined but not otherwise marked or labelled; no error feedback), and found that both error feedback groups did significantly better than the no-feedback control group, but, like Robb et al. (1986), they found that there were no significant differences between the group that received coded feedback and the group that did not receive coded feedback.

Sanosi (2022), for example, concluded from the study they conducted concerning the use of automated written corrective feedback on EFL learners' academic writing accuracy that the participants who used Grammarly as a writing assistant for 14 weeks demonstrated significantly better writing accuracy scores as compared to the participants of the control group, who did not.

Though there is an expanding but far from conclusive body of research on feedback strategies, there is not much data concerning the effect of other feedback strategies, such as teacher-student conferences, peer-editing sessions, and the keeping of error logs (Ferris, 1995), which all help to focus the learners on the process of learning rather than on the final product of it. Some studies have been looking into whether certain types of corrective feedback are more likely than others to help L2 students improve their EFL skills, such as, for example, the accuracy of their writing. Truscott (1996), for example, noted that none (Kepner, 1991; Semke, 1984; Sheppard, 1992) had found significant differences across any of the different treatment groups (content comments only; error correction only; a combination of content comments and error correction; error identification but no correction), yet when the evidence from studies that have considered other feedback distinctions is examined, it is clear that such a conclusion should at this stage be treated with caution (Bitchener, Young & Cameron, 2005). Many EFL teachers, for example, see teacher-student conferences to be potentially more effective than other types of corrective feedback because the one-on-one meetings enable them to clarify, instruct, and negotiate (Ferris, 1995; Ferris & Roberts, 2001), but the absence of published empirical research on this means that this popularly held belief cannot be taken as evidence of effectiveness.

Thus, there is obviously a need for further research which will look at and compare the impact of receiving corrective feedback and no corrective feedback (Truscott, 1996), as well as what types of feedback would best serve the function of helping the learners acquire, develop and improve their speaking and writing skills.

3. METHODOLOGY

In order to take a closer look at the issue of how to best help EFL learners deal with developing and improving their writing and speaking skills, a small-scale survey was conducted to see how learners view the aspect of receiving feedback on specifically these

two areas. In addition, some informal research was carried out at the same time, where the same subjects were arbitrarily divided into two groups, Group A and Group B.

The subjects were seniors at the Department of English Language and Literature, at the “Blaže Koneski” Faculty of Philology, within Ss Cyril and Methodius University in Skopje, N. Macedonia. There were 32 respondents in total, 29 females and 3 males, all from the teaching stream offered at the Department. In all probability, the factors that the subjects were seniors and that they were from the teaching stream played a significant role in the results, as it is expected that their previous experience at the Department significantly helped them to do the tasks successfully, even those that were not provided with the set criteria beforehand. Had the subjects been first-year students, or even second-year students, for example, the results are expected to have been different.

Furthermore, these were all students from the teaching stream, which means that they had some previous (limited) teaching experience, and were, more or less, aware of the stages involved in the process of assigning tasks.

The fact that the great majority of the subjects are female is not surprising bearing in mind the great female to male ratio at the Department of English Language and Literature, and is not believed to have had an impact on the overall results.

3.1. Data collection and analysis

As this was done as an optional activity with absolutely no negative repercussions on those that decided not to participate, the subjects are all students who decided to volunteer and who wished to take part. There might be different reasons as to why they decided to participate, but this was not something they were asked to elaborate on.

The majority of the subjects were at a B2+/C1 level of proficiency, in accordance with the CEFR, and this was ascertained through a placement test that was administered at the start of the research. The seniors at the Department of English Language and Literature are expected to be at a C1-C2 level of proficiency, and the placement test was administered as a precaution, to avoid surprises in terms of the types of errors that might appear in the writing and speaking tasks. Thus, we may note that the results from the placement test were not surprising, since, as noted previously, the students are expected to have reached this stage of English proficiency. There were three subjects that demonstrated a C2 level of proficiency, which is also within our expectations. The research itself was carried out over four weeks in the spring semester of 2021/2022.

After having completed the placement test to confirm their level of English proficiency, the subjects were then asked to answer the following questions concerning their feedback of writing and speaking skills: *How would you assess learners' writing and speaking skills?; What are some potential issues that you might encounter?*

Then, the subjects were divided into two groups, arbitrarily, and were asked to complete a writing task and a speaking task. In one task, one group was the control group, while in the other task, the other group became the control group.

The writing task was done first, and it included having the subjects write an opinion paragraph of 300-350 words on a given topic. They all had the same topic - *Exams do not best reflect a student's knowledge on a particular subject and should be eliminated*. None of the subjects were given explicit instructions on how to write an essay, as they had already had done this in the previous semesters in some of the courses at the Department.

The Group A subjects were the control group for this task, and they were not provided with anything else save the starting instructions that everyone had on the writing task itself, which were *Write an essay of 300-350 words on the following topic*. They were not provided with any other criteria concerning feedback on this task, nor what to pay attention to.

The Group B subjects, on the other hand, besides the general instructions from above, were provided with the following scales, a set of criteria concerning feedback, adapted from a scale developed by the Hungarian School-leaving English Examination Reform Project (Table 1), and a scale with criteria for assessment, with a set of guidelines for assessors, from the above-mentioned Project (Table 2). We should also note that since the subjects here held a relatively high level of English proficiency, the lowest scores on the scale were removed for our purposes.

Table 1 Analytic writing scale adapted from that developed by the Hungarian School-leaving English Examination Reform Project

	Task achievement	Coherence and cohesion	Grammar	Vocabulary
10	all content points elaborated	fully coherent text; cohesive on both sentence and paragraph level	wide range of structures; few inaccuracies that do not hinder/disrupt communication	wide range of vocabulary; accurate vocabulary communicating clear ideas; relevant to content
8	most content points elaborated; all content points mentioned	good sentence level cohesion; some paragraph level coherence and cohesion	good range of structures; occasional inaccuracies hinder /disrupt communication	good range of vocabulary; occasionally inaccurate vocabulary communicating mainly clear ideas; overall relevant to content
6	some content points elaborated; most content points mentioned	some sentence level cohesion; frequent lack of paragraph level coherence and cohesion	limited range of structures; frequent inaccuracies hinder/disrupt communication	limited range of vocabulary; frequently inaccurate vocabulary communicating some clear ideas; occasionally relevant to content with some chunks lifted from prompt

Table 2 Criteria for assessment / guidelines for assessors

Criteria for assessment	Check	Look for
Task achievement	Depth of coverage: which content points are elaborated? which content points are mentioned? Text type requirements: are the text-specific conventions observed?	content points most elaborated with the most detail / just mentioned briefly; any relevant and original thoughts / superfluous details / irrelevant parts that do not belong in the text; formal/informal language use; layout conventions of the text type
Coherence and cohesion	Organization and linking of ideas: is the script coherent? is the script cohesive? Paragraphing: does the script need to be and is it divided into paragraphs? Punctuation:	logical organization of ideas / whether the ideas follow one another logically; clear / correct marking of the relationship between sentences and their parts; variety and appropriateness of linking devices; organization of ideas developing one sub-topic into one paragraph; proper indication of paragraphs: block or indented; clear / correct marking of the relationship between paragraphs; correct use of punctuation marks
Grammar	Grammatical range: is there a range of grammatical structures? Grammatical accuracy: is the grammar correct?	variety of grammatical features (tenses, structures, modals, auxiliaries, etc.) used in proportion of accurate / inaccurate sentences and clauses; the occurrence and reoccurrence of specific mistakes; bad grammar leading to unclear meaning
Vocabulary	Lexical range: is there a range of vocabulary items? Lexical accuracy: is the vocabulary used accurately? Lexical relevance: is the vocabulary relevant to the topic(s) specified in the task?	variety of words and expressions used; words used accurately / inaccurately (meaning and spelling) relevant vocabulary / irrelevant vocabulary; ratio of words and expressions not lifted / lifted from task

Two weeks after the subjects completed the writing task, they were asked to do a speaking task with the teacher. They were kept in the same groups - Group A and Group B, but this time it was Group A that received the criteria for the speaking task, whereas Group B did not, and was thus the control group.

For this task, the students were asked to come together in pairs/groups of three + teacher, who was the interlocutor. Students were asked to come together in pairs or groups of three as establishing groups and group roles enables stronger students to adopt leadership roles and it encourages more hesitant students to provide more input, thus improving participation (Bury & Hair, 2022). The task was organized for both groups in the same way, and both groups were informed as to how the speaking activity would be organized, with the difference being that the Group A subjects were also informed on how their speaking skills would be evaluated, provided in Table 3, below. Like with the writing task previously, the lowest scores have been removed from the rubric, bearing in mind that these are subjects with a level of English proficiency of B2+ to C2.

Table 3 Speaking rubric (adapted) from public version of the IELTS exam

	Grammatical competence	Vocabulary	Pronunciation	Fluency, coherence and cohesion
10	uses a full range of structures naturally and appropriately; produces consistently accurate structures apart from 'slips' characteristic of native speaker speech	uses vocabulary with full flexibility and precision in all topics; uses idiomatic language naturally and accurately	uses a full range of pronunciation features with precision and subtlety; sustains flexible use of features throughout; is effortless to understand	speaks fluently with only rare repetition or self-correction; any hesitation is content-related rather than to find words or grammar; speaks coherently with fully appropriate cohesive features; develops topics fully and appropriately
8	uses a wide range of structures flexibly; produces a majority of error-free sentences with only very occasional inappropriacies or basic/non-systematic errors	uses a wide vocabulary resource readily and flexibly to convey precise meaning; uses less common and idiomatic vocabulary skillfully, with occasional inaccuracies; uses paraphrase effectively as required	uses a wide range of pronunciation features; sustains flexible use of features, with only occasional lapses; is easy to understand throughout; L1 accent has minimal effect on intelligibility	speaks fluently with only occasional repetition or self-correction; hesitation is usually content-related and only rarely to search for language; develops topics coherently and appropriately
6	uses a range of complex structures with some flexibility; frequently produces error-free sentences, though some grammatical mistakes persist	uses vocabulary resource flexibly to discuss a variety of topics; uses some less common and idiomatic vocabulary and shows some awareness of style and collocation, with some inappropriate choices; uses paraphrase effectively	uses a range of pronunciation features with mixed control; shows some effective use of features but this is not sustained; can generally be understood throughout, but mispronunciation of individual words or sounds reduces clarity at times	speaks at length without noticeable effort or loss of coherence; may demonstrate language-related hesitation at times, or some repetition and/or self-correction; uses a range of connectives and discourse markers with some flexibility

3.2. Discussion and implications

Not surprisingly the subjects that were provided with the evaluation criteria for both the writing task and the speaking task did better than those who did not receive such criteria. In terms of the writing task, the average mark for Group A, which did not receive the evaluation criteria beforehand was 8.1 (out of a maximum of 10), while the average mark for the same task for Group B, which did receive the evaluation criteria prior to completing the task was 9.3. It should be noted that the errors that caused the Group A subjects to lose points in this task were not so much of a grammar and vocabulary nature, but were connected more to task achievement and coherence and cohesion, which would in all probability have been better had they been previously informed of the evaluation criteria. The feedback the subjects received for this task was teacher feedback, with a follow-up meeting individually or in pairs afterwards, for a general discussion of the results. The impressions the subjects shared were that, indeed, had they been previously informed of the evaluation criteria that the Group B subjects had, they would have achieved better results in the writing task.

The speaking task yielded much the same results, in that this time the Group A subjects were informed of the evaluation criteria, and, as expected they did better, achieving an average mark of 9.4 (out of a maximum of 10) than the Group B subjects, who did not have the evaluation criteria beforehand, and who scored an average mark of 8.9. Afterwards the students were asked to come in for a follow-up meeting, to discuss the results and their overall impressions. The impressions, especially of the Group B subjects, went much along the same lines as those of the Group A subjects previously - that they would have done better had they had the evaluation criteria, since the area they tended to lose points in was that of fluency, coherence and cohesion, and not so much in grammar, vocabulary or pronunciation.

Thus, the impressions shared by the participants in the discussion with the teacher post-tasks were in line with when the subjects were a part of the control group - they felt they would have done better had they been informed of the evaluation criteria, and they were able to see first-hand the importance of establishing and providing such parameters.

In terms of the questions they were asked to answer at the start, *How would you assess learners' writing and speaking skills? What are some potential issues that you might encounter?*, the subjects were more or less in accord that though assessing these two skills specifically is more challenging, it is, by no means impossible to carry out objectively. Interestingly, several answers included the option of having these two skills assessed not just by one teacher, but by two or three, and then calculating an average mark, with the aim of making the assessment even more objective. Other answers included having the students being involved in the process of assessment as much as possible, and using peer-review and portfolios, in writing tasks, and pair and group work, and debates in speaking tasks.

4. CONCLUSION

The overriding feeling among EFL learners is that the productive skills - speaking and writing - cannot be taught, hence, assessed. There are several issues that need to be addressed here, all equally important, but all coming back to more or less the same point - that of the importance of feedback and especially of establishing clear and objective criteria in the various feedback strategies employed.

The relative frequency of errors (and the corrective feedback thereof) may contribute to students' understanding of feedback and corrective suggestions (Sanosi, 2022), further emphasizing the vital significance of feedback strategies in the teaching and learning process.

Learners tend to, incorrectly, interchangeably use communicative competence and speaking skills, and these are often seen as the most important to master when it comes to learning a foreign language. As EFL learning enables and facilitates communication, we can see the reasoning behind this, that speaking skills equal communication skills. If the communication is in written form, then that communication requires proficient writing skills, another set of skills seen by learners as difficult to learn, and to be objectively assessed in.

However, these skills, speaking and writing, can be evaluated objectively, within a given set of parameters, by using various rubrics and band scores that provide an accurate description of the learners' proficiency in the given area.

The role of feedback in any teaching and learning context is undisputed, and this goes for language teaching and learning, and especially where a foreign language is concerned. There are many types of feedback that may be employed, which are, in fact, complementary, and not mutually exclusive. What is constant in all this is the importance of the teacher establishing clear and objective criteria, as this will provide the learners with clear expectations, which, in turn, will alleviate the stress that is inevitably present in this stage of the learning process. In addition, this will allow the learners to manage and organize their own expectations, thus enabling them to retain autonomy over their learning. By using a variety of feedback strategies, the learners will, over time, start to focus on learning as a process, consisting of numerous stages, rather than a final product.

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Review research paper

TED LECTURES FOR ESP: BEST PRACTICES META-ANALYSIS

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Abstract. *The study aims at investigating incorporation of TED talks (TTs) in ESP classes with a specific focus on abundant opportunities TTs provide for teaching intensive and extensive listening. Although the importance of listening comprehension is widely admitted, a few scholars still claim that it remains the most neglected micro-skill of all, a “Cinderella of communication strategies”. This imbalance can be partly put down to lack of graded listening materials of appealing content for lower proficiency students and TTs might serve as a potential remedy for ESP learners. The nature of TTs (with TED standing for Technology, Entertainment and Design) is of great interest for learners due to engaging topics, motivating speakers, easy access and overall user friendliness. Therefore a few SLA instructors have been attempting to utilize TTs in various ways, which include, but are not limited to vocabulary development and retention, listening comprehension, translation skills, speaking assignments varying from guided discussions to oral presentations, reading comprehension skills, writing and summation, EAP, etc. A few integration models have been suggested and evaluated in past literature. The author attempts to draw on those and suggest a detailed account of advances that refer to teaching extensive and intensive listening comprehension.*

Key words: ESP, listening comprehension, TED talks, meta-analysis

1. INTRODUCTION

TED (<https://www.ted.com/>) is a global community which gathers people of different disciplines to share ideas worth spreading, usually in the form of short powerful talks of 18 minutes and less. Having emerged in 1984 as a conference on Technology, Entertainment and Design, it has evolved into a non-profit organization for interaction and exchange of ideas worldwide. The topics covered by TED talks (TTs) include, but are not limited to technology, entertainment, design, business, science, global issues, etc. By 2022 the TED platform has accumulated over 4100 talks in 100+ languages delivered in a signature TTs engaging vibrant manner. Due to motivating and engaging nature as well as overall appeal to general public, there have been numerous attempts to utilize TTs in ELT classes. Some of the TED talks were included in textbook series, e.g. the Keynote by National Geographic Learning (Stephenson et al, 2015-2016). Apart from that, the TED platform launched the TED-ED project, which features online lessons based on

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short comprehensive TTs (<https://www.ted.com/>). Past literature suggests a substantial bulk of research featuring utilization of TTs by ESL instructors to develop such skills as critical thinking (Allagui, 2021), higher level comprehension skills (Bianchi et al, 2016), translation and subtitling (Comas-Quinn et al, 2019), metacognitive skills (Stout et al, 2019), discourse analysis skills (Uicheng et al, 2018), (Ratanakul, 2017), academic writing (Hashimoto et al, 2015), (Howard, 2017), (Fitria, 2022), note taking (Siegel, 2019), speaking/presenting ideas (Hayward, 2017), (Karunakar, 2019), (Leopold, 2016), (Li et al, 2016), reading comprehension (Hsu, 2020), (García-Pinar, 2019), vocabulary acquisition and retention (Hsu, 2020), (Salem, 2019).

A considerable amount of research has been dedicated to teaching listening comprehension by TTs. Although a few studies have argued the importance of listening comprehension in SLA pedagogy (Feyten, 1991), (Wolvin, 2010), (Wolvin et al, 2000) it still remains a much neglected skill and has even been referred to as the “Cinderella” of communication strategies (Vandergrift, 1997). Therefore, SLA instructors worldwide have been offering TTs to language learners in order to increase their exposure to authentic contexts with engaging and appealing design. This is especially true for the ESP/EAP instruction, because of significant lack of graded pedagogic materials that could be offered to the learners of lower proficiency levels who might lack vocabulary range as well as listening comprehension skill to appreciate unabridged professional contexts. Thus past research indicates numerous attempts to integrate TTs-based listening comprehension tasks into the syllabi of general English courses (Wu, 2020), (Puspita et al, 2020), (Saputra et al, 2018), (Al-Jarf, 2021), (Tilwani et al, 2022), (Mojgan et al, 2019), EAP courses (Madarbakus, 2021), (Abdulrahman, 2017), (Wingrove, 2017), (Takaesu, 2017) and ESP courses (Rudneva et al, 2019), (García-Pinar, 2019), (Humeniuk et al, 2021), (Kekelidze et al, 2021).

The benefits of TTs for teaching ESP listening are summarized in Fig. 1

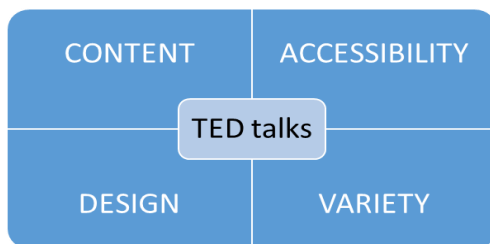


Fig. 1

Speaking of content, the selection of offerings for ESP listening has always been a challenge for an instructor. Not being an expert in the major domain of the language learners, one might find it complicated to elicit trustworthy talks from the abundance of information available on the Internet. In this sense, ted.com is a reliable platform with renowned speakers and built-in search engine, which allows not only to select a major topic, but also align ESP offerings with the syllabi of the learners in their major line of study.

In terms of accessibility TTs are hard to match: they are free, can be viewed in a browser or in a downloadable a pp on any device in the classroom or off-site, any time of day and

night, with pauses or repeatedly. These features provide a tremendous opportunity for self-paced learning.

As for the design, the TTs are a combination of auditory and visual information arranged in an inspirational and motivating way. Web 2.0 technologies are appealing for the “digital natives” and foster better engagement as well as understanding through visual cues they provide (Milošević 2022)

The variety of TTs should not be underestimated, the ESP instructor can decide on many factors when selecting a talk, apart from its general topic, i.e.:

- the length of the talk;
- the speed of the talk;
- vocabulary range/complexity;
- whether the speaker is native or non-native;
- which accent they prefer.

The abundance of options provides an opportunity to implement bottom-up approach on many planes of ESP acquisition, increasing complexity of TTs offerings throughout the syllabus in terms of content, length, vocabulary and speed of speech.

Despite obvious benefits of TTs, their implementation in a consistent longitudinal perspective has been yet under researched by ESP community. However, past research in general SLA suggests a number of instructional models which can be adopted by ESP/EAP as well. Thus, the key research questions are:

- 1) What is the overall effect of integrating TTs into SLA syllabi on second language proficiency?
- 2) What is the attitude of the learners towards TTs?
- 3) What are the factors that influence the variation on effects of TTs integration?

This paper aims at providing an overview of best practices for teaching listening comprehension with TTs that can be adopted by ESP instructors.

2. METHODS AND OBJECTIVES

The meta-analysis was carried out in 3 stages:

- literature selection;
- coding of the study synopses;
- estimating the effects.

Literature selection was conducted based on the following assumptions: (1) the paper features an experimental or a quasi-experimental design, i.e. there are measurable outcomes suggested; (2) the paper is cited at least once, i.e. the academic community consider it a valid contribution; (3) the paper was published within the past decade, i.e. 2012-2022; (4) the findings are reported in English; (5) the paper is either an article in an academic journal or a thesis. The search was performed in Google Scholar, the key term *TED Talks* was combined with such keywords as *second language acquisition, listening comprehension, reading, writing, speaking, vocabulary, grammatical, lexical*.

Coding of the study synopses was preceded by the paper selection process, 48 papers corresponding to the research design criteria were found. Then they were read by the author and coded based on 13 study features, such as: the domain (ESP/EAP/GE), the skill or skills featured; research design; the number of students; EFL proficiency; the duration of the experiment; treatment of offerings (guided/autonomous); attitude

research, its outcomes; limitations; the topics of TTs offered; features of pedagogic design; any additional online tools and platforms used by the instructor.

Estimating the effects of TTs implementation was conducted based on the analysis of the features above and their contribution towards positive outcomes.

3. DISCUSSION

Out of 48 papers analyzed, only 10 feature the studies conducted with ESP/EAP students. García-Pinar (García-Pinar, 2019) and Himeniuk et al (Humeniuk et al, 2021) suggest TTs to engineering students, Hashimoto et al offer TTs on technical topics (Hashimoto et al, 2015), Salem (Salem, 2019) utilizes business TTs to improve presentation skills of the BE students, Rudneva (Rudneva et al, 2019) focuses on the TTs dedicated to environmental issues, Stout suggests TTs to chemistry students (Stout, 2019). The scope of domains featured above reflect great demand for graded listening materials for the students who major in hard sciences. EAP instructors use TTs as authentic speech models (Leopold, 2016), extensive listening materials (Takaesu, 2017), a resource for academic vocabulary acquisition (Abdulrahman, 2017) and listening comprehension (Madarbakus, 2021). The GE instructors exercise flexible approach towards TTs topic selection which is best described as offering topics of general interest (Siegel, 2019). Some researchers introduce limitations, i.e. Islamic content TTs (Kusuma, 2017) or police-related ones (Alrefai et al, 2019). In most cases the TTs are suggested by the instructor, however, some researchers demonstrate more flexibility assigning the learners to watch TTs of their own choice (Hayward, 2017).

The participants of the study come from various locations, 9 papers feature projects implemented in Indonesia, the rest of the studies have been mostly conducted in the Eurasian region (Fig. 1).



Fig. 1. Geographic distribution of TTs projects

Speaking of the size of experimental groups, there is a broad range from 6 participants (Hakobyan, 2015) to 468 (Takaesu, 2017). However, the majority of papers feature

groups of an average size of 50 learners, also usually divided into experimental and control groups. The age of learners varies from 12 (Hakobyan, 2015) to 29 (Tilwani et al, 2022). However, there might be learners of more senior age even though the authors do not specify it, e.g. the project of TTs for in-service police officers (Alrefai et al, 2019). The instructors offer TTs to the groups of learners whose target language proficiency is between A2 and C2, as indicated in Fig. 2

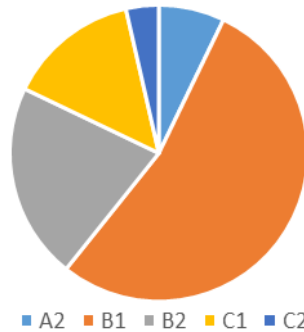


Fig. 2. Distribution of learners re: CEFR

The absolute majority of projects feature learners of intermediate language proficiency. This goes in line with the recommendations by Hsu (Hsu, 2020) who claimed the vocabulary range of TTs is suitable for B1 and upper proficiency students. Few studies feature mixed-abilities groups of A2-C1 (Karunakar, 2019) and of A2-C2 (Puspita et al, 2020), there is no indication though of variation of offerings within a group based on language proficiency. The language proficiency was determined by IELTS (Allagui, 2021), (Salem, 2019), (Madarbakus, 2021), TOEFL (Leopold, 2016), (Takaesu, 2017) or in-house tests of similar format. The learners study at high school (Huang et al, 2014), (Damayanti et al, 2022), (Farid, 2019), college (Howard, 2017), (Karunakar, 2019), university (Comas-Quinn et al, 2019), (Li et al, 2016), (Nguyen et al, 2019) and other establishments such as air force school (El Haj Hassan et al, 2018) and UN police courses (Alrefai et al, 2019). In terms of duration of offerings three groups of projects can be outlined. The first one would be pilot projects where the learners were offered TTs once or twice. Allagui (Allagui, 2021) measured the impact of TTs on the learners' critical thinking skills by eliciting their opinions before and after viewing a TED lecture. The intervention lasted 2 hours and the overall impact on critical skills was rated as positive. Hashimoto et al offered one short TED talk with a follow-up discussion and an off-site written assignment of summarizing the talk content. The learners reported increased confidence in summarizing strategies (Hashimoto et al, 2015). Nguyen (Nguyen et al, 2019) measured the impact of a TT on vocabulary acquisition induced by a particular sequence of input-output-input activities and report a significant improvement of word-meaning recall based on immediate and delayed post-tests. Overall, even a single encounter of TTs yielded a number of improvements in the learners. The second group of projects highlight a short sequence of interventions which lasted for 4-6 weeks. Comas-Quinn (Comas-Quinn et al, 2019) tasked students to translate the subtitles of a TED talk of their choice and review and provide feedback on two of their peers' translations

covering linguistic, cultural and technical aspects they had encountered. Martínez Hernández (Martínez Hernández et al, 2018) designed 4 interventions based on TTs selected to meet students' preferences. The offerings included pre-, while and post-watching activities which resulted in new coined vocabulary and increased motivation. Hassan (El Haj Hassan et al, 2018) offered 4 weekly assignments to Air Force School students and although the impact of TED talks on the overall language proficiency and their contribution into the overall score was not studied, the findings suggest increased engagement and motivation. The third group of projects employs longitudinal framework with TTs based sessions offered throughout one to six semesters. Hayward suggested consistent integration of TTs into a textbook-based course on public speaking (Hayward, 2017). The same strategy was supported by Leopold who made TTs an integral part of an EAP course on professional presentation skills (Leopold, 2016) as well as Lee (Li et al, 2016). Stout made TTs a part of a writing-enriched chemistry course, where the aim of TTs integration went beyond presentation skills towards critical assessment of learners metacognitive processes of writing and thinking (Stout, 2019). A few studies report significant improvement of learners' listening comprehension skills based on pre- and post-test analysis and/or questionnaires (Kozínska, 2021), (Ratnaningsih et al, 2022), (Tilwani et al, 2022). In terms of instructor involvement, the projects can be divided into guided, semi-guided and autonomous. *Guided* approach suggests pedagogic design of the following stages:

- selection of TTs based on the topic, accent, pace of speech, duration (Martínez Hernández et al, 2018);
- pre-watching activities, such as explaining vocabulary (Karunakar, 2019), instructions on note-taking (Siegel, 2019);
- while-watching activities, such as discourse analysis (Allagui, 2021), note-taking (Siegel, 2019), listening journal (Schmidt, 2016);
- post-watching activities, such as oral or written summary, discussion (Hashimoto et al, 2015), role play, short speech, debate (Karunakar, 2019), preparing a TT-based or a TT format presentation (Leopold, 2016);
- follow up assessment, such as grading written and oral assignments (Salem, 2019), providing feedback on the listening journals (Puspita et al, 2020).

Semi-guided approach would offer certain level of flexibility on the learners' side, usually independent selection of talks with follow-up assessment of written reports (Stout, 2019) or listening journals by the instructor (Gavenila et al, 2021). Past literature suggests that delegating material selection to students makes learning truly learner-centered and enhances one's level of engagement in course activities and tasks (Choi, 2015).

An *autonomous* approach features projects which delegate the responsibility of selecting and studying TTs to the learners entirely, such framework demonstrates high dropout rates and humble progress (Comas-Quinn et al, 2019).

Several studies feature *mixed* approach to instructional design with an experimental group offered on-site guided tuition and control group tasked to study off-site independently (Mojgan et al, 2019), (Madarbakus, 2021). The comparative approach allowed to yield results which indicate significant difference in favour of on-site treatments. Few studies report on using additional tools and platforms apart from ted.com. Some instructors utilize in-house LMS systems (Comas-Quinn, 2019), (Hashimoto et al, 2015). Bianchi et al suggest using LearnWeb which integrates TED

learner autonomy is usually paired with high dropout rate though. In terms of instructional design most studies feature activities prepared by the instructor, some utilize discussion questions offered by TTs and few feature free flow watching. Various types of assessment were discussed, i.e. written and oral follow-up assignments, TTs-based or inspired presentations, various vocabulary and listening comprehension tests. The assignments target all core language skills, such as speaking, writing, reading and in the majority of cases listening comprehension. Apart from that some studies feature sub-skills, such a summarizing or metacognitive skills, such as critical thinking.

The learners report multiple benefits of TTs claiming that they are fun, effective, building confidence, motivating, inspirational and supportive. Among potential challenges the instructors highlight technical problems of various nature, discouraging effect of TTs on lower-proficiency learners who struggle with tasks. Apart from that in every social group there might be a learner who is not keen on TTs in general, which might impede the instruction.

As for the factors which influence the variation of effects on TTs integration, the key one is accurately assessing the level of language proficiency of the learners to align the offerings to their capabilities. Lower proficiency learners require more scaffolding activities and more extensive instruction. Past research suggests that for mixed abilities groups watching the TTs before the class might be a potential remedy, because in this case the learners can watch the video as many times as they need. It has been suggested that although one TT to watch is an encouraging and motivating exercise, the impact on linguistic skills is minimal. Therefore, the instructor should allocate considerable time commitment as longer exposure yields better results.

5. CONCLUSION

Based on the past research several outcomes can be outlined. TTs are widely used by SLA instructors all over the world and demonstrate multiple benefits for the learners. These benefits however are only gained though proper instructional design and long-term commitment. Multiple opportunities provided by freely available and easily accessible TTs should be utilized by the instructors thoughtfully based on the language proficiency of the learners, their preferences, the syllabi and expected outcomes. Although it is hard to single out the *exclusive* effects of TTs on overall language proficiency of the learners, their contribution to developing language skills as well as enhancing engagement and motivation is undeniable.

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Review research paper

STUDENTS' MOTIVATION, CHALLENGES AND EXPERIENCES IN DESIGNING VIDEO PRESENTATIONS VS. DELIVERING ORAL PRESENTATIONS IN AN ESP COURSE FOR SOCIAL SCIENCES

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Abstract. *This paper has two primary goals: 1) to help students understand the effectiveness of using videos; and 2) to promote students' motivation, interactivity, creativity and communication by designing their own video. The study was conducted at South East European University (SEEU) with 14 students. They were ethnic Albanian students, between 18 and 20 years old, who come from linguistically and culturally diverse backgrounds, but who were all enrolled in the ESP course for Social Sciences I. Students were given the task of selecting a topic that is professionally linked to their field of study. They were then instructed to deliver an oral presentation in class according to established criteria from rubrics, and to produce the same presentation at home by using a video with self-evaluation rubrics. I conducted a survey comparing the motivation, experiences and challenges students faced while delivering an oral presentation in class vs. video-recorded presentations made at home.*

The preliminary research findings showed that most of the students were motivated to create their own videos because they were not limited by time or place: the asynchronous learning allows students to access materials, and to practice their skills, at any time that works for them. The majority of the students found this pilot project very interesting and engaging because it helped them develop their communication skills as well as to become more autonomous in learning English.

Key words: *motivation, video-recorded presentations, asynchronous learning, communication skills, creative abilities, autonomous learning*

1. INTRODUCTION

At South East European University, English for Specific Purposes (ESP) is emphasized because students from various fields develop and improve their language skills through communication in the target language. The use of video for educational purposes is not a new phenomenon and it has been reported and implemented since the early 1960s (Williams & Lutes, 2011, p. 95).

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This paper relates an effort to help students from the course ESP for Social Sciences 1 to raise their creativity and to develop their oral presentation skills by producing two presentations: one oral presentation in class and another video presentation made at home. Moreover, students were able to select a topic of their preference from their professional field. The purpose was to compare students' motivation, challenges and experiences in designing their own video at home compared to the oral presentation delivered in class. One of the most stimulating factors for the students was the fact that they were motivated to create their own videos asynchronously, so that they were not limited by time or place and they could practice and record the video at any time convenient for them. In addition, students who recorded and posted their video-recorded presentations on the software management system Google Classroom were rewarded with bonus points which were added to their final grade points.

Due to globalization and internationalization, the ability to speak a second language has become one of the most important skills when looking for a job. The purpose of universities worldwide is to help students develop their leadership skills through oral and written communication, and to build teamwork, and in those ways to stimulate the development of critical thinking skills (Kerby& Jeff, 2009). Oral presentation skills play a vital role when delivering a presentation in a seminar, conference or any other academic event. Teachers should pay a lot of attention—especially in professional courses such as ESP—to prepare students and help them develop good communication skills that can enhance their opportunities for employment (Campbell, Mothersbaugh, Brammer, & Taylor, 2001; Murillo-Zamorano&Montanero, 2018). According to (Chan, 2011) students should be taught to present orally in class at the undergraduate level, and not to postpone it to the postgraduate level. Most importantly, in ESP for Social Sciences, soft skills are taught as part of the curriculum that also helps students develop precise and clear presentation skills that will prepare students for the job market.

2. TEACHER'S ROLE IN PROMOTING LEARNER'S AUTONOMY

The improvement of new technologies helps in adjusting traditional materials to online teaching models, as well as providing enhanced opportunities for students, moving from traditional to more student-centered teaching methodologies. By implementing the Learning Management System (LMS) Google Classroom, students at SEEU are both encouraged and challenged to become more autonomous within and outside the classroom.

E-learning is a type of learning that supports and helps improving the quality of teaching and learning. A Learning Management System (LMS) is developed with the notion of "one size fits all", however this cannot be applied for every educational institution because it differs in its experience, so it can be concluded that one size cannot really fit all (Dagada & Mungai, 2013, p.151).

The E-learning process at SEEU brought important changes to its educational concept, as well as how challenging it is to successfully and efficiently establish it. It is very important to find balance between teaching, learning and management (Wolley, 1994; Nicholson, 2007). The teacher's role in promoting learner autonomy is crucial and more complex than in traditional teaching. The teacher's role is to encourage learners and to promote learner autonomy both in the classroom and, especially, outside the

classroom. Teaching with technology is considered to be one of the most productive ways to promote autonomy by using appropriate exercises which foster learner autonomy in an English as a Foreign Language (EFL) class.

Furthermore, lecturers will also need to develop technological and educational skills needed for the transmission of information outside the classroom (meaning the preparation of materials for students to work at home—such as videos, digital documents, and web links) and the material needed for reviewing student work (such as practical exercises and questionnaires). This means learning to use technological and educational resources that facilitate these tasks and thus increasing the effectiveness of online presentations. In this type of reverse methodology, it is essential that lecturers conscientiously plan their own and students' activities before, during, and after classes (Rivera & Guiza, 2017, p.2).

The lecturer ceases to be a mere presenter of information and evaluator of assimilation. During the class, the lecturer must lead, guide, observe and evaluate students by providing relevant feedback when necessary. The lecturer's role as an assessor also becomes more difficult because he or she must perform additional monitoring and assessment and offer more formative feedback to students. The lecturer will also have a decisive role in determining what should be taught and what should be studied by students. For this reason, teachers must possess or acquire knowledge of the methodologies that are particularly effective at encouraging student effort and learning, and in promoting learners' autonomy. Lecturers must make a personal commitment to student learning and this will mean more hours of work (especially during the first year of the new methodology).

The use of the Learning Management System (LMS) makes it possible for teachers to create and deliver a course online with additional resources and activities; students can access the course content and participate online, at any time and place. The difficulties that appear with LMS are how to maintain the efficiency in communication, and how to balance learning and management. The problem that comes as a consequence of e-learning and the application of LMS in higher educational institutions is that many institutions lack an adequate comprehensible plan for which LMS are to be deployed, and with what aim, how much teachers and students are motivated to apply it in the process of teaching and learning.

3. THE USE OF VIDEO-RECORDED PRESENTATION TO MOTIVATE AND IMPROVE STUDENTS' PRESENTATION SKILLS

Teaching ESP learners is indeed challenging. ESP teachers are constantly looking for new materials that can enhance the teaching and learning processes. Video is an important tool that can be implemented successfully with ESP students and, at the same time, it offers learners content, context and language that can stimulate them to develop critical thinking skills. The use and the potential of various websites, particularly video-sharing services such as YouTube (Ted Talks), can be explored in an ESP class and can motivate students to become more fluent in the target language.

For ESP courses effective communication is one of the most important learning outcomes. Students at this level are advanced learners of English as a foreign language, and they can easily communicate in both oral and written forms. In addition, in ESP for

Social Sciences 1, students' performance in delivering oral presentations was assessed according to established criteria from rubrics. Students in this project-based learning demonstrated all the experience gained in the course in the form of a project. According to recent studies (Condliffe, 2016; Iwamoto et al., 2016; Harmer & Strokes, 2014; Holmes, 2012; Bell, 2010; Thomas, 2000; Katz & Chard, 1992) PBL increased critical thinking skills, the acquisition and application of information, collaboration, and academic achievements. The video presentation made students became (to some extent) self-directed and it involved them in constructive investigation. According to Bell (2010) PBL is an innovative approach that integrates several disciplines where teachers act as a guide who motivates students to take action. Teachers who successfully used PBL, according to Harmer and Strokes (2014), found many benefits: development of communication and social skills, increased student motivation and enjoyment, and deepened engagement beyond their school interaction.

The implementation of this kind of PBL requires planning and the use of scaffolds to engage students in the process of constructing knowledge. In this research, students were required to demonstrate and perform by creating a project that was presented in class, and would be evaluated by the teacher and the students by giving feedback and reflection. Moreover, students were also given an opportunity for self-evaluation and self-critique by preparing a video-recorded presentation at home. The use of video-recording, according to the empirical research, is an effective technique for evaluating and improving students' oral presentation skills (Hamilton, 2012; Guo, 2013; Nikolic, Stirling, & Ros, 2018). It can also help students obtain cognitive insights and identify their areas of improvement; student feedback additionally helps teachers assess and enhance students' communicative competence (Hattie & Timperley, 2007; Hamilton, 2012).

After delivering an oral presentation in class students submitted presentation feedback and written work in the form of a project. However, taking into consideration the Covid-19 pandemic and the fact that SEEU implemented a hybrid mode of teaching, students were given an opportunity to design their own video in order to stimulate their interactivity and to improve their communication skills. The video-recorded presentation was part of a pilot project whose purpose was to stimulate students' interaction and to engage them at home. The goal was to prepare them to become more autonomous in English as their foreign language by using innovative technological methods that should ready them for their future jobs.

In addition, for the oral presentations students were able to present in front of a class and to receive feedback from the teacher evaluating their performance. Most of the students had problems with self-confidence; eye contact and body language; voice quality; and appropriate preparation. The teacher noted that these skills needed improvement. Nevertheless, by using video-recordings students could capture, review and evaluate their performance by themselves. In addition, students' video presentations were voluntary and experimental and the assignment raised students' interest and motivation for the future use of video-recorded presentations in other advanced proficiency courses. Students had the chance to complete a self-assessment questionnaire at home about their video presentation. In addition, all ESP students completed a peer evaluation feedback form for each oral presentation conducted in class.

The results from the survey conducted at the SEEU Language Center with my students from the course ESP for Social Sciences 1 showed that oral presentation skills

are very important when teaching English as a foreign language and students need them especially for their future jobs.

4. FINDINGS AND RESULTS

The Language Center offers language instruction that is a central part of every SEEU student's academic career, both as obligatory and as optional courses. The University's mission is to promote a multilingual approach to learning—stressing both the importance of local and international languages—and Language Center primary mission is to provide courses specified in the curricula of the five SEEU faculties. For this purpose, the Language Center offers classes in English starting from the basic skills up to English for Specific Purposes in fields such as law, computer sciences, social science, and business administration.

The E-learning processes present an essential part of teacher and student coursework at South East European University. The wide use of Google Classroom is now an integral part of the annual staff evaluation process. Students' use of the system is also evaluated per semester due to the high percentage of the grade allocated for the successful integration of Google into the coursework.

This particular research was carried out during the fall semester of 2021 and the findings and results of this study showed that students in the ESP Social Sciences 1 course were very motivated and challenged to prepare a video presentation at home. A total number of 14 students who were actively engaged in the ESP course participated in the study. This particular group of students was between 18 and 20 years old; they were ethnic Albanian students who came from linguistically and culturally diverse backgrounds. I conducted a survey comparing motivation, experiences and challenges students faced while delivering an oral presentation in class vs. video-recorded presentations made at home. The purpose of this research was to stimulate students to become more autonomous in learning English, as well as to become prepared for 21st century skills (notably soft skills) at their workplaces. In addition, this experiment attempted to motivate students to communicate in the target language by promoting their creativity, specifically by producing a video presentation at home, an assignment intended to be unlimited by day, time and place.

The questionnaire was designed with the sole purpose of measuring the perception of students of the different educational, as well as methodological aspects of integrating technology in their educational process. The data focuses on students' profiles by comparing the results about their motivation for presenting in class vs. producing their own video presentation at home. There were surprising aspects about the results that were produced by the students. Around (75%) of the interviewed students enjoyed delivering oral presentations and projects in the ESP for Social Sciences 1 course, while (25%) did not like to deliver presentations in class. Similarly, 62.5% of the students liked making video presentations at home, while 37.5% did not like making their own video at home.

Results from the questionnaire

	Strongly agree	Agree	Disagree	Strongly Disagree
1. I like delivering Oral presentations and doing projects in my ESP Social Sciences 1 course.	12.5%	62.5%	12.5%	12.5%
2. I like making Video presentations at home for my ESP Social Sciences 1 course.	50%	12.5%	37.5%	0%
3. I like to make Video presentation at home more than deliver Oral presentation at home.	37.5%	37.5%	12.5%	12.5%
4. I like to use new technologies and video presentations instead of Oral presentations.	25%	37.5%	37.5%	0%
5. I like the Oral presentations more than video presentations.	12.5%	37.5%	12.5%	37.5%
6. I don't like to be limited by day, time and place.	37.5%	25%	37.5%	0%
7. I like Video presentations because they don't limit you by day, time, place.	25%	62.5%	12.5%	0%
8. I like to present my Video presentation in my ESP Social Sciences 1 course	12.5%	37.5%	25%	25%
9. How important is for you to deliver a good oral presentation in class?	<i>Very important</i> 50%	<i>Important</i> 37.5%	<i>Neutral</i> 12.5%	<i>Not very important</i> 0%
10. Do you feel confident in your Oral presentation skills?	<i>Very confident</i> 25%	<i>Confident</i> 37.5%	<i>Not confident</i> 37.5%	
11. How much time do you use to do research on the Internet before making your presentation?	<i>2-5 hours</i> 87.5%	<i>6-10 hours</i> 12.5%	<i>More than 10 hours</i> 0%	<i>I don't do research on internet</i> 0%
12. How much time do you use to prepare your PowerPoint presentation?	<i>2-5 hours</i> 87.5%	<i>6-10 hours</i> 12.5%	<i>More than 10 hours</i> 0%	
13. How much time do you use to write your project?	<i>2-5 hours</i> 75%	<i>6-10 hours</i> 25%	<i>More than 10 hours</i> 0%	
14. Are you satisfied with your proficiency in English?	<i>Very satisfied</i> 37.5%	<i>Satisfied</i> 37.5%	<i>Not satisfied</i> 12.5%	<i>I should improve</i> 12.5%
15. Are you satisfied with your communicative skills in English?	<i>Very satisfied</i> 37.5%	<i>Satisfied</i> 50%	<i>Not satisfied</i> 12.5%	<i>I should work on improving</i> 0%
16. I like to evaluate my colleagues' presentations (peer review) by using rubrics.	<i>Strongly agree</i> 12.5%	<i>Agree</i> 75%	<i>Disagree</i> 12.5%	<i>Strongly disagree</i>
17. The teacher gives clear instructions how to do Presentations and projects in class.	75%	25%	0%	0%
18. The teacher posts useful materials on GC about how to do Presentations and projects in class.	50%	50%		
19. I am satisfied with my Oral (video) presentation done in class.	0%	12.5%	37.5%	25% and should improve 25%

It is worth mentioning that most of the students found this pilot project very interesting and engaging: 75% of the students preferred to produce a video at home, and only 25% expressed an interest to present an oral presentation in class. The majority of the students (63.5%) liked the use of new technologies, such as video presentations, being implemented in ESP courses, and only 37.5% disagree. Asynchronous learning is one of the most beneficial factors that motivate students to present at any time or place possible for them. Most of the students (62.5%) did not like to be limited by day, place or time and only (37.5%) disagreed. 87.5% of the students preferred the video presentations because they could be delivered at any time and only 12.5% disagreed.

Since the video-recorded presentation was a pilot project, most of the students liked to receive feedback only from the teacher and completed a self-evaluation check; they disliked for their video presentations to be officially presented (seen) in class. I found this interesting information, because it might be that this was a completely new experience for them, as well as making them question their confidence in their language skills. However, the percentage of students that liked to present their video presentation in class was 50%, while the other 50% disagreed.

The data showed that the majority (87%) of the students spent 2-5 hours researching on the internet, and only 12.5% spent 6-10 hours to do research online. The same percentage of students uses those times to prepare their PowerPoint presentations. As for their writing part—the project that students need to submit after completing their presentation—75% of the students use only 2-5 hours, and only 25% spent 6-10 hours.

75% of the students are satisfied with their proficiency in English, 12.5% are not satisfied, and 12.5% think that they should work on improving their language skills. Furthermore, 50% of the students are satisfied with their communicative skills, 37.5% are very satisfied, and 12.5% are not satisfied.

In addition, most of the students strongly agreed (75%) that the teacher gave clear instructions on how to do the presentations and projects; (25%) agreed. Students also agreed that the teacher posted useful materials on the Google Classroom about how to do presentations and projects. 75% of the students agreed, and 12.5% strongly agreed, that they liked to evaluate their colleagues by using rubrics; an identical percentage (12.5%) disagreed.

At the end students were satisfied with how they presented in class: 25% strongly agreed, 12.5% agreed, 37.5% were not satisfied with their presentation, and 25% stated that they thought that they should improve.

Although these are overly enthusiastic positive responses, the access and availability of technology in education is omnipresent, and it can definitely be concluded that teachers should engage and stimulate students' progress by implementing new technological methods that can help students become more autonomous in learning English.

5. CONCLUSION

It can be concluded that video is a visual medium and can be used as a valuable tool, especially when used as part of an active learning approach. It is an effective intrinsic motivator and it shows that it has a positive impact on student motivation when implemented in an ESP course. Furthermore, video is an important tool for stimulating students to learn a language. It provides communication and it promotes language acquisition.

The results from the survey showed that around 75% of the interviewed students liked to deliver oral presentations and projects in the ESP for Social Sciences course. Most of the students found this pilot project very interesting and engaging. 75% of the students preferred to produce a video at home. However, only 25% expressed an interest in presenting an oral presentation in class. The majority of the students (63.5%) liked the use of new technologies (such as video presentations) when implemented in ESP courses. Most of the students (62.5%) liked asynchronous learning and did not like to be limited by day, place or time, while 87.5% of the students liked the video presentations because they could be delivered at any time preferred.

Teachers should keep motivating students by helping them to engage and interact within and outside language classes. In addition, students obtain information outside the classroom by using digital software, and the time spent in the classroom is dedicated to real interaction between the teacher and the student (which ensures the correct assimilation of information). In this way, teachers use their role in the teaching-learning process with different techniques that promote student learning. Taking into consideration Bloom's Taxonomy, teachers should assign content materials for study outside the classroom from the lowest levels of the taxonomy (comprehension and recall). Furthermore, students can take advantage by assimilating contents linked to higher levels (create, evaluate, analyse and implement). In this study the results showed that a majority of students (87%) spent 2-5 hours doing research on the internet. As for their writing part—the project that students needed to submit after completing their presentation—75% of the students used only 2-5 hours, and only 25% spent 6-10 hours. 75% of the students were satisfied with their proficiency in English, while only 12.5% were not satisfied. Furthermore 87.5% of the students were satisfied with their communicative skills.

In addition, students strongly agreed (75%) that the teacher gave clear instructions on how the presentations and projects should be done; the same percentage strongly agreed that the teacher posted useful materials on the Google Classroom about how to do presentations and projects. 75% of the students agreed and 12.5% strongly agreed that they liked to evaluate their colleagues by using rubrics. At the end students were satisfied by how they presented in class: 25% strongly agreed, 37.5% were not satisfied with their presentation, and 25% stated that they think that they should improve.

It is very important for teachers to raise students' productivity online by engaging them actively in online communication activities. The implication for higher educational institutions is that they should shift their focus and invest in online learning, thus stimulating students to become more autonomous in learning English as a foreign language. One of the drawbacks of this pilot project was that students did not want their video presentations to be officially presented (seen) in class. It can be concluded that students found this experience motivating from perspective, but from another point of view they probably lacked self-confidence in their language skills.

Teachers should engage and stimulate students' progress by implementing new technological methods that can help students become more autonomous in learning English. Creating their own video presentations can help students become more interactive, and promote their creativity and communication. The results from the study showed that students' motivation was increased and that they enjoyed designing their own videos asynchronously; they also enjoyed practising their language skills, body language, and critical thinking skills at their convenience.

It is a fact that by the use of contemporary methods such as blended learning, teachers help students use the learning time flexibly outside the classroom in order to facilitate and enhance (theoretical and practical) teaching and learning. Implementing contemporary methods of engaging students in online activities at home asynchronously is much more effective and efficient than just the traditional learning model.

The purpose of higher educational institutions is to motivate students to develop leadership skills through oral presentations, video presentations, project-based learning, teamwork, and the stimulation of students' critical thinking skills. Teachers at universities should help students improve their communication abilities by giving them opportunities for enhancing experiences—such as delivering presentations in class or online—and giving them chances for new advanced experiences that will prepare them for the job market.

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Review research paper

IMPLEMENTATION AND EVALUATION OF ESP COURSES FOR UNIVERSITY LIBRARIANS IN CHINA AND KAZAKHSTAN

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Abstract. *The discussed ESP module for librarians was one of eight modules developed and implemented within the DIREKT Erasmus+ project funded by the European Commission through the Capacity Building in the Higher Education Program. The aim was to improve, develop and modernise higher education systems in Asia through university cooperation. The idea behind teaching English to librarians was to equip them with an ability to provide support to academic staff and students concerning information resources, databases and research studies, which are available mainly in English. Librarians are the key link between the activities of academic staff, students and the library, therefore there is a need for librarians to reach at least an A2 level of the CEFR in English. The ESP module is aimed to develop a functional language for the library staff in authentic library situations, such as borrowing and returning books, using library jargon, providing assistance, guidance and advice in finding quality library sources and databases, referencing, citation and avoiding plagiarism. This research study aims to evaluate the implementation of the ESP module for librarians at five universities in China and Kazakhstan. Research methods applied in this study were observation, students' questionnaires and teachers' evaluations. To summarize the findings, it was discovered that even though the taught module was the same, there were differences in focus, teaching techniques, activities and used materials.*

Key words: *English for specific purposes (ESP), information literacy, library terminology, information resources*

1. INTRODUCTION

The objective of the theoretical part is to provide foundations regarding English for Specific Purposes focusing on library terminology and to discuss in detail an ESP module on library terminology within the Erasmus+ project DIREKT (Developing Trans-regional information literacy for lifelong learning and the knowledge economy) funded by the European Commission through the Capacity Building in Higher Education Program (2017-2019) to develop and modernise higher education in Asia through university cooperation. The DIREKT project aims to instil best Information Literacy practices in

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higher education systems, to up-skill library and academic staff, specifically their transferable, pedagogical and lifelong learning skills in the Information Literacy field by developing capacity and affecting all stakeholders including students. It is targeted at improved, more relevant university services in the Information Literacy area leading to better awareness, modernization and improvements in teaching and learning. Further objectives are creation of curriculum-integrated Information Literacy programmes (embedded in the three cycle-system – bachelor, master, doctorate), quality assurance and recognition of qualifications for the development of lifelong learning in higher education and society, as well as incorporating appropriate electronic media (DIREKT, n.d.). The project consists of 7 modules:

- Module 1: English for Specific Purposes (ESP: library terminology)
- Module 2: Information Literacy: Marketing skills for Academic staff librarians
- Module 3: Information Literacy 1: (Finding and using information effectively and ethically)
- Module 4: Information Literacy 2: (Accessing information online and in print, liaising effectively with Library users and enhancing their pedagogical and teaching skills)
- Module 5: Information Literacy 3: (Innovative online library services for 21st Century Librarians)
- Module 6: Information Literacy and Academic Writing 1
- Module 7: Information Literacy and Academic Writing 2

Module 1 is aimed at mastering English for Specific Purposes (ESP) in the library context. It deals with the functional language of the library staff and natural language in authentic library situations and is designed for librarians working at academic institutions and universities. The module consists of 46 contact hours, 14 homework assignments, 6 presentations and 6 designs of library promotional flyers. It covers topics on a personal information calendar, dates, time and money, phone numbers, library collections, library space, library services, library opening hours, library jargon, rules of conduct in the library, library electronic resources, borrowing and returning books, finding books in the library, library communication, library staff and professional presentations.

2. ENGLISH FOR SPECIFIC PURPOSES

According to Hutchinson and Waters (1987), English for Specific Purposes (ESP) refers to learning a language in the context of a particular English vocabulary, of a specific field such as medicine, business, aviation, etc. In the application of particularized vocabulary to the learners, whose general English language competencies in most cases, are reasonably sufficient and their subject of interest is the enrichment of the vocabulary in a specific area of the English language. According to Strevens (1988: 1-2), ESP meets “specified needs of the learner, related in content to particular disciplines, occupations, and activities, centred on the language appropriate to those activities, in syntax, lexis, discourse, semantics, etc”. Subject matters may include themes or topics governed by students’ needs, purposes, and interests, or any subject in their curriculum. Dudley-Evans and St. Johns (1998) state that ESP as a specialised category of the English language should reflect the fact that in the teaching process of ESP, where the majority of vocabulary learned is linked to a specific profession or discipline, the methodology differentiates from the methods used in teaching general English. Paltridge and Starfield

(2013) understand ESP as an umbrella term, demonstrating the teaching of a foreign or second language, where the students aim to use the language in a specific life field. According to Collins English Dictionary (Collins dictionary 2022), ESP specifies a particular genre of the teaching of the English language to students, whose native language is not English, but who need it for a specialised job, activity, or purpose. Bojovic (2016) believes that for learners of ESP, the age factor needs to be considered and claims that the majority of ESP learners learn this particular form of language for a specific reason, and at a particular time of their lives, primarily in adulthood. This is particularly true with librarians as learners of foreign languages.

3. LIBRARIAN ENGLISH AS A PART OF ENGLISH FOR SPECIFIC PURPOSES

The language used for professional communication (ESP) has led to the production of many materials and courses developed for specific fields such as Legal English, English for medical science and nursing, English for Tourism, Business English, English for Biology, English for Engineering, etc., but it is challenging to find materials and courses on English for librarians. Instead, teachers prepare their materials collected from different sources, and ESP courses for librarians depended much upon the teacher's background, experience, and knowledge. Indeed, not much attention has been dedicated to this particular field of ESP and there is little literature available on teaching English to librarians. Only two research studies on the topic were identified. They report on research carried out as a result of the need to make librarians more confident when communicating with foreigners (students and teachers participating in mobility programmes), and to make them able to benefit from the information on the internet and in e-resources, which is mostly available in English.

Fontanin (2008) described an English course for librarians using an in-service blended learning experience which received a positive response from the participants. The learning activities covered reading comprehension, listening activities from podcasts, speaking including a discussion and describing library services, and writing to prepare learners (librarians) for participation in international conferences, contributions to international journals and preparation of EU project proposals. The multimedia-based activities were successful in developing librarians' English proficiency and provided them with opportunities to learn English without leaving their work.

Mukminatien (2017) presented a model for developing a speaking syllabus for librarians using a CLIL (Content Language Integrated Learning) approach designed for the Blended Learning platform. The development of librarians' speaking ability was intended to be achieved by accommodating syllabus content to librarians' need to improve their professional competence. According to the author (*ibid.*), the syllabus can also be used by students of Library Science to develop their communication skills as a pre-service training course.

The ESP courses for librarians mentioned above represent individual efforts to help librarians practise English at work, so that they are able to give foreign language speakers the same qualified assistance they give those who speak their language. The research part of this paper is dedicated to an analysis of a particular ESP module on English for librarians developed within an international project aimed at developing trans-regional information literacy, fostering partnerships between faculty and librarians, and integrating the new and changed roles of librarians.

4. RESEARCH

The research part introduces and describes research methodology. Firstly, research aims and questions are specified. Secondly, the participants are introduced and described. Next, research methods are presented. Finally, the results are analysed and interpreted, and conclusions are drawn.

4.1. Research Aims and Research Questions

The paper has the following research objective:

1. To evaluate the implementation of the ESP module for librarians at five universities in China and Kazakhstan - Almaty, Astana, Kostanay, Nanjing, and Xi'an.

Based on the objective, the following research questions were established and explored throughout the study.

1. How was the ESP module implemented at five universities in China and Kazakhstan - Almaty, Astana, Kostanay, Nanjing, and Xi'an?
2. How did the teachers manage to deal with the module concerning their teaching techniques, activities, sources, etc'?
3. How did the learners evaluate the course and their teachers?

4.2. Participants

Research subjects included 104 learners (librarians) and 8 teachers. The research was conducted in 2019 during which twenty-four lessons were observed, teachers' evaluations and self-reflections and learners' questionnaires were collected and analysed. Purposive (selective) sampling was used in this study, which is common in qualitative research and mixed research (Flick, 2010). This sampling method relies on researchers' judgement when selecting the individuals (librarians) that can provide the best information to achieve the aims (learning ESP). In this case, the participants were selected by the project leaders at each participating university.

All the participating learners (104) were qualified librarians at five different universities in two Asian countries of Kazakhstan and China. Librarians' age was between 23 and 58, the average age was 36. An interesting fact was that the majority of librarians in Kazakhstan were female, where only one male was in Astana and one male was in Almaty. All librarians in Kostanay were female. On the contrary, the majority of librarians in China were male, with only five females in Nanjing and four females in Xi'an.

Participating teachers (8) were either qualified English language teachers or highly qualified librarians with a very good command of English. Three teachers in Almaty were qualified English language teachers, two teachers in Almaty and the teacher in Kostanay were librarians. The teacher in Nanjing was a library director and the teacher in Xi'an was an English language teacher. These teachers were selected by the project leaders at each university.

Table 1 Participants

	Almaty	Astana	Kostanay	Nanjing	Xi'an
Learners (librarians)	30	28	10	15	21
Teachers	3	2	1	1	1

Table 2 Observed lessons

	Almaty	Astana	Kostanay	Nanjing	Xi'an
Observed lessons	9	6	3	3	3

4.3. Research Methods

The research methods used in this study were observer-as-participant observation, teachers' evaluations and self-reflections and learners' questionnaires consisting of 12 questions based on a Likert scale (1-5 from strongly disagree to strongly agree). The obtained data were processed through categorisation and triangulation. Triangulation attempts to map out the richness and complexity of situations by studying them from more than one standpoint. In this case, the whole picture is gained by combining observation, teachers' self-reflection and learners' evaluations.

In the observer-as-participant observation, researchers are more detached, where objectivity and distance are key characteristics. All participants (teachers and learners) were informed about the aim of the research. Observed data were collected, categorised, and compared on common features and differences (Flick, 2010). In this research study, 24 lessons of ESP were observed in five different universities in Kazakhstan and China.

Evaluations and self-reflections are commonly used in qualitative research in education. Self-reflections are written in the first-person point of view (in this case by the teachers). The purpose of self-reflection is to broaden the teachers' perspectives and discover new thoughts and teaching practices (Ortlipp, 2008). The eight teachers were given semi-structured forms which included questions for evaluation of the course and learners. Self-reflection questions focused on examples of good/innovative practice, other appropriate issues, updated booklists, and ideas/actions for future deliveries.

The third research method used was a Likert scale questionnaire, in which learners choose the option that best supports their opinions. Likert scale are closed questions testing to measure beliefs, attitudes and opinions. The questions use statements and respondents indicate how much they agree or disagree with that statement (Cohen, Manion, Morrison, 2007). The questionnaire in this study included 12 statements and used a five-point scale (1-5 from strongly disagree to strongly agree). The questionnaire was filled out by 104 learners to evaluate the ESP course and their teachers. The questionnaire included a column for further comments.

5. RESEARCH RESULTS

5.1. Observation analyses

The method of observer-as-participant observation was carried out, where the researchers were known to the participants, but did not have much contact with them. Twenty-four ESP: library terminology lessons were observed in five universities in Kazakhstan and China that were following the same module developed within the DIREKT Erasmus+ project Capacity Building in Higher Education. The modules were further implemented in all participating non-European countries. The researchers were project participants responsible for the evaluation of the implementation of the modules. Data from observations were noted in a semi-structured observation schedule, which

included information on lesson aims, activities and methods, materials, assessment, subject expertise, and learning outcomes.

Table 3 Observation data

Aims	ALMATY In correspondence	ASTANA In correspondence	KOSTANAY In correspondence	NANJING Partially	XI'AN In correspondence
Activities and methods	Communicative teaching approach	Effective activities combining English and library ESP	Suitable activities for beginners developing basic English in a library context	Old fashioned – lecturing, GTM, filling-in exercises, teacher-centred. No connection between parts of the lessons.	Old fashioned – lecturing, GTM, filling-in exercises
Use of materials	Mainly course book exercises, handouts, speaking activities, videos	A lot of extra materials, creating own materials, use of websites, videos	Course book, handouts, videos	PowerPoint presentation, handouts	Handouts based on English – Chinese fill-in exercises, translation practices
Assessment	Attendance, participation, final test, presentation, role-play, flyers	Participation, attendance, assignments, test, presentation, flyers, role play	Attendance, participation, home assignments, final test	Attendance, test, homework assignments	Attendance, homework, test
Subject expertise	Teachers were qualified English language teachers. More focus on general English, and not enough library ESP. No connection between different courses.	Individual parts of each course were interconnected. Teachers (librarians) were professional and well-prepared.	All learners were beginners, and the young teacher (librarian), struggled with motivating learners and respect.	Teacher was the library director, who was lecturing and using individual work: doing exercises unrelated to the library vocabulary introduced in the lecture part.	The teacher was an English language teacher and was prepared. Teaching was old-fashioned, with no-interaction – lecturing and individual filling-in exercises.
Learning outcomes	Partially achieved, need for continuation and more library ESP	Achieved, learners wanted to continue. Positive attitude, useful learning	Achieved, but the teacher had hard work to motivate learners	Limited achievement. Minimal interaction, and very little use of English.	Partially achieved – individual work, no interaction, a lot of translation.

To summarise the findings from the observation (Table 3), it can be noted, that even though the same module was implemented, the results were not the same. The aims of the observed lessons were generally in correspondence with lesson plans from the module, just the lessons observed in Nanjing had very limited correspondence with the aims of the lessons. Each lesson had the same structure: lecturing about library terminology and individual filling-in exercises which were not even in correspondence with the first half of the lesson.

Most universities used course books for general English. Own materials, handouts, exercises for library English, presentations, websites and videos were used too. The two Chinese universities used very old-fashioned teaching techniques such as grammar translation method, and individual work filling-in exercises with no interaction and communication. Teachers at universities in Almaty and Astana used a more communicative approach, however, the qualified English language teachers focused more on general English, whilst the librarians from Astana tried to integrate a lot more library English.

Assessment at all universities was done via attendance, test, homework assignments and participation. Role plays and participation were also assessed by Kazakh universities. The most creative approach was taken by the university in Astana, where learners were creating posters and flyers in English.

Concerning subject expertise, the teachers were either qualified English language teachers or librarians. It was observed that English language teachers focused more on general English, whilst librarians integrated more library ESP. However, the teacher in Nanjing was the library director, who was not a teacher and his teaching methods were neither engaging nor effective. Learning outcomes were achieved at different levels. It was very difficult to assess achievements by Chinese universities, as there was mainly teacher centred approach observed with very little English and no interaction. Lecturing was a common teaching technique. No use of English was observed by the learners. On the other hand, all three Kazakh universities made a lot of effort, mainly the university in Astana with very motivated young teachers (librarians), who managed to motivate learners (majority females aged over 40). The teachers in Almaty were all English language teachers and focused mainly on general English and included very little library English. There was no evident connection between the different courses. The teacher (librarian) in Kostanay was well prepared and tried hard, but struggled with the motivation of learners.

5.2. Analyses of self-reflections

Teachers of the observed lessons were given to fill in semi-structured forms containing statements evaluating the taught courses and statements self-reflecting their teaching. Together, there were eight teachers. Four were qualified English language teachers and four were qualified librarians with a very good command of English.

Table 4 Evaluations and self-reflections

	Evaluation of the course	Examples of innovative practice	Other issues	Updating booklist	Recommendations for future deliveries
Almaty 1	Lack of resources, lack of practice in real-life situations.	Student-centred approach, activities: a job interview, a system of library services in English	Different age groups with different educational background	Websites: British council, YouTube videos on ESP	Cooperation with subject specialists in the development of library ESP materials, establishing speaking clubs
Almaty 2	Balanced module with good teaching materials.	Activities organised in a form of a game (did not specify)	Evaluated the course as highly successful.	Teaching methodology course books (Scrivener, Swan, Walter).	Use YouTube tutorials on ESP in the library context. Involve librarians with good English in teaching.
Almaty 3	Appreciated the need for everyone to know English.	Focus on conversational skills in everyday and professional communication.	Need for librarians to gain access to original scientific resources.	Course books for general English and YouTube videos.	Development of further exercises, recommendation for the cooperation of teachers with librarian specialists.
Astana 1	The Module focused more on language in context than on teaching grammar.	Online interactive materials, videos, and discussions.	Learners understood the need to learn ESP.	ESP course book, Headway online materials, British Council online materials	Continue to work with librarians in more specialised fields, further creation of flyers, and posters for the presentation of the library in English.
Astana 2	Well planned module, provided librarians with the necessary skills for working in online databases, sources, etc.	Online interactive materials, videos, and discussions.	Librarians were interested in learning English – a requirement for every modern librarian.	ESP course book, Headway online materials, British Council online materials	Continue to work with librarians in more specialised fields, further creation of flyers, and posters for the presentation of the library in English.
Kostanay	Understand the necessity to have English competencies for librarians.	Individual approach, created own exercises addressing specific difficulties.	Mixed native languages of learners (Russian and Kazakh), which caused difficulties. Problems with motivation.	Further English language course book, YouTube videos, Headway online.	Recommendation for all librarians to absorb this module to be able to work with library resources in English.
Nanjing	Appreciation of English competences for the need to work with international resources and working with international students.	Phone-based learning tool: Intelligent classroom, online platform: Speak English fluently, Tutor ABC.	Use of technology, software and online tools.	Online tools and applications.	Recommendation to enlarge the target group to all librarians and also the academic staff.
Xi'an	Good module for improving librarians' English which helped them to deal with foreigners.	Role-plays in the class – practising English and their daily work.	None.	None.	None.

To summarise evaluations and self-reflections of teachers, it can be said that all teachers agreed with the need for librarians to have at least basic knowledge of English to be able to work with international resources, databases, international students, academic staff, etc. English language teachers in Almaty focused more on general English and struggled with library terminology and topics. They complained about the lack of resources for library ESP. Teachers who were librarians found it easier to focus on the working needs of librarians. Especially the teachers in Astana were highly qualified, knowledgeable and progressive librarians with a very good command of English. They managed to motivate their learners to learn and use English during their library duties, they were creating posters, flyers and presentations in English and were motivated to speak English. The university in Astana appreciated the need for librarians to know at least the basics of English and added ESP to their annual development plan for the library. The situation in Kostanay was specific because of several reasons. Librarians lacked motivation and had different backgrounds and native languages. Issues with different native languages caused difficulties, as the teacher had to work in three different languages (English, Russian and Kazakh). Teachers at Chinese universities had a very different approach. Both teachers used lectures as a main teaching technique, but claimed to use role-plays too. The teacher in Nanjing included a lot of online, phone-based tools and applications for learning English. The teacher in Xi'an did not express any ideas for further materials or recommendations for future deliveries. Based on the evaluations and self-reflections of Chinese teachers it can be assumed that there was not such a motivation to learn English at Chinese universities as it was at Kazakh universities.

5.3. Analyses of learners' questionnaires

One hundred and four learners (librarians) from three Kazakh and two Chinese universities were participants in the implementation of a project module focusing on librarian ESP. All participants filled in a five-point Likert scale questionnaire consisting of 12 statements (teacher: well-prepared, gave interesting and informative classes, explained the subject clearly, was effective in leading the class, was receptive to students' questions, stimulated interest in the subject, demonstrated a deep knowledge of the topics discussed during the session, applied all types of assessment set in the module overview, worked effectively with all module materials, followed consequently the aims of the module, focused on achieving the learning outcomes). The questionnaire was to evaluate the teachers. Learners also had a chance to write further comments about the teacher or the course.

The evaluation score by all 104 participants was very high, where the majority of learners marked most statements as 'strongly agree' or 'agree'. It can be concluded that most learners enjoyed the classes and appreciated the opportunity to learn English during their working time and free of charge. Many learners said that the courses were too short and they expressed their desire to continue learning. Some learners admitted that it was hard to motivate themselves to learn and find time to learn outside of the classrooms and do their homework. Feedback from Chinese learners was somehow different, as they either did not give any comments or commented about 'lectures', which also proves that teaching was carried out mainly by teachers lecturing with very little interaction. An interesting fact was that only one out of all Chinese learners expressed his/her wish to continue learning English.

Table 5 Questionnaire data

	Average score	Further comments
Almaty 1	81% of answers were 5 19% of answers were 4	Most feedbacks were in Russian, a few were in English: <i>"I liked our teacher. I would like to continue my studies. I think the courses were too short."</i> <i>"We had an experienced teacher. I want to study more. I want to use English in my work also."</i> <i>"I want to study English for free and to continue learning courses at our university."</i> <i>"I want to continue. Because there was a too short time for studying."</i>
Almaty 2	88% of answers were 5 12% of answers were 4	Most feedbacks were in Russian, a few were in English: <i>"I liked our teacher. We studied English courses every day. I want to study more."</i> <i>"It was difficult for me to study and work at the same time, but I really liked the teacher. I really want to continue and improve and learn how to speak."</i> <i>"I want to have more intensive courses in English."</i> <i>"I want to study English in connection with library studies or searching systems used in the library."</i>
Almaty 3	86% of answers were 5 14% of answers were 4	Most feedbacks were in Russian, a few were in English: <i>"Course was well organised. I liked these courses. But it was short, I want to prolong my studies."</i> <i>"I want to study English more. Time was short for 2 months."</i> <i>"I improved my language level, but the length of the course was too short."</i>
Astana 1	81% of answers were 5 18% of answers were 4 1% of answers were 3	<i>"At the beginning it was hard...I will continue learning the language."</i> <i>"Every lesson was useful and interesting."</i> <i>"I fell in love with English."</i> <i>"I am a little lazy, but teachers helped me to stimulate."</i>
Astana 2	81% of answers were 5 18% of answers were 4 1% of answers were 3	<i>"It was a desirable atmosphere thanks to our girls [teachers], for the high level of professional instruction."</i> <i>"Our teachers explained the material, illustrated it with entertaining examples and supported our interest throughout the course."</i>
Kostanay	63% of answers were 5 36% of answers were 4 1% of answers were 3	There were no comments in the evaluation form at all.
Nanjing	85% of answers were 5 15% of answers were 4	<i>"Well said and excellent speech."</i> <i>"I like this speech very much."</i> <i>"I love your speech."</i> <i>"The speech is very good."</i> <i>"It was a great speech."</i>
Xi'an	83% of answers were 5 17% of answers were 4	<i>"She is a good teacher, she explained the subject clearly."</i> <i>"Interesting and informative classes."</i>

6. INTERPRETATION OF THE RESEARCH RESULTS

To maximise the validity of the findings, the triangulation of methods was used: observation, teachers' self-reflections and learners' evaluations. In triangulation, there are three types of results: converging, complementary and contradicting results. In this research, comparing all three research methods in triangulation, findings converged in unified results. Findings from observations were complemented with findings from self-reflections and learners' evaluations.

Five universities, three in Kazakhstan and two in China, were taking part in the Erasmus+ DIREKT project. Module 1 ESP was focusing on the development of English in the library context. The module was developed by the project participants and it was

implemented in these five university libraries. Generally, the implementation of the module was successful at all five universities.

Findings from the three research methods showed that Kazakh universities had a high interest in developing ESP among their library staff. All Kazakh teachers and learners understood the need to have English language competencies for being able to work with international resources and databases, work with international students and create propagation materials in English. The only difference was that English teachers focused more on general English, whilst the librarians focused more on English in a library context. Almaty was a former capital city and the participating university is the highest-ranked university in the country. It has many international students and the importance of English is well understood. This could be seen in their approach and motivation to the implementation of the course. A similar situation was in Astana, today's capital of the country. The teachers, who were themselves librarians, had a very good command of English and a profound understanding of modern librarians' needs, and this was very well transferred to their learners. Even though there was also an understanding of the importance of English at the university in Kostanay, there was a struggle with the motivation of learners. We assume that it was because it is a regional town with a small university which does not attract many international students or academic staff.

In comparison, findings from research done in China showed quite different results. The enthusiasm, motivation or need for learning English, which was very strong in Kazakhstan, was not visible in China. Teaching techniques and activities were teacher-centred, using GTM with very little interaction and communication. Most teaching was done by lecturing or individual filling-in exercises. Teachers did not comment much about improving and updating the courses and only very few learners express a desire to continue.

7. CONCLUSION

The aim of this research study was to evaluate the implementation of the ESP module for librarian learners at five universities in Kazakhstan and China. To reach reliable and valid findings, three research methods were used and results were concluded by triangulation (comparison of findings). Based on this objective three research questions were stated:

1. How was the ESP module implemented at five universities in China and Kazakhstan - Almaty, Astana, Kostanay, Nanjing, and Xi'an?

All five universities followed the same ESP module developed by project participants. Even though it was the same module, the implementation was quite different concerning the main focus, teaching techniques, activities, materials, and a will to continue. Overall, all five universities claimed that the outcomes of the ESP module were successful.

2. How did the teachers manage to deal with the module concerning their teaching techniques, activities, materials, etc?

Depending on the main qualification of the teachers, the focus varied. The English language teachers focused more on general English and the teachers who were librarians focused more on English in a library context. The teaching techniques, activities, and materials differed depending on the country. Whilst the teachers in Kazakhstan tried to use more modern communicative teaching techniques, the

Chinese teachers used old-fashioned GTM, lecturing, and individual filling-in exercises.

3. How did the learners evaluate the course and their teachers?

All learners in both countries were highly satisfied with their courses and teachers. Most Kazakh learners were enthusiastic, enjoyed the opportunity to learn English, and wanted to continue. Chinese learners did not show such enthusiasm, even though they evaluated the course and teachers very highly. Noteworthy is that they did not express any desire to continue.

Module 1: English for Specific Purposes (ESP: library terminology) was developed by project participants and implemented at three Kazakh and two Chinese universities. The idea was to equip librarians with the ability to provide support to academic staff and students with international resources and to help international students and academic staff. For this reason, librarians need to have English proficiency at least at the A2 level according to CEFR. As the results show, there was a different approach between the universities in Kazakhstan and China. The reason might be that Kazakhstan shows a more pro-European attitude, following the official policy of three languages (Kazakh, English and Russian). On the other hand, China does not appear as open to the world and is very much more self-centred. Concerning the academic world, China is largely self-sufficient with thousands of scientific journals published in Chinese, indicating they value the need for international journals, or publishing in international spheres less.

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Review research paper

DESIGN OF ESP COURSE FOR GROUPS OF STUDENTS FROM DIFFERENT DEPARTMENTS WITHIN HUMANITIES AND SOCIAL SCIENCES

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Abstract. *In today's practice of teaching ESP at the university level, especially at the faculties with a great number of departments, it sometimes happens that the students from different departments are grouped to attend ESP lessons. Such a situation occurs due to different circumstances and conditions, such as a disproportional number of students at individual departments, the number of allocated lessons per week, classroom organization of the teaching process, etc. The paper will present, elaborate and discuss, the design of an ESP course for groups consisting of students from different departments within humanities and social sciences, in the duration of four semesters (four subjects, two academic years), with a special emphasis on the selection and creation of course materials. In doing that, both relevant and current ESP literature and practical experiences will be used. The outcome of the paper will be the creation of a detailed course plan, containing all the components relevant to its practical application.*

Key words: *ESP, course, creation, design, humanities, social science, professionally mixed groups*

1. INTRODUCTION

English for Specific Purposes (ESP) plays a significant role in contemporary professional education as English has emerged as a global language, acting as a neutral means of communication between speakers from diverse linguistic and cultural backgrounds, being used for international communication in a variety of domains and is not tied to any specific country or culture. In her study *Introducing Course Design in English for Specific Purposes* (2018), Woodrow gives an overview of the role of English in the world today, as well as a detailed presentation of the historical development, classification, and types of ESP.

Numerous definitions of ESP can be found in the literature. According to Kováčiková (2020: 27), ESP traditionally refers to courses that teach the English language needed for specific academic or occupational contexts. In a wider context, it is used as an umbrella term for English language education offered at non-philological faculties and plays a significant role in tertiary education where students use English for their academic studies. On the other hand, Anthony (2018: 10-11) defines ESP as an approach to language teaching that targets

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learners' current and future academic or occupational needs, focuses on necessary language, genres, and skills, and helps learners meet these needs through general and discipline-specific teaching materials and methods. Tudor (1997: 91) notes that ESP courses deal with domains of knowledge that an average educated native speaker may not be familiar with, which distinguishes it from the teaching of general English, thus contributing to Basturkmen's view of ESP as the subject focusing on when, where, and why learners need the language in study or workplace contexts, with a strong focus on situated language use (2010: 8).

In the context of this paper, the proper definition of English for Special Purposes would be a rather synthetic one, which observes ESP as a subject or set of subjects taught in the form of a course at many universities today and is closely associated with faculties that offer different forms of professional or vocational education and training. The course is designed to provide students with an expanded knowledge of the English language that is specifically tailored to their field of study or work. The main objective of ESP is to prepare future professionals to be able to use English effectively and efficiently in all aspects of their professional communication, including reading, speaking, listening, and writing. Due to that, one of the key and unique aspects of ESP is that it deals with the specific characteristics of vocabulary, grammar, and discourse of a particular professional or vocational field. This approach ensures that students are not only capable of understanding the language of their field but are also able to use it accurately and fluently in a professional context.

2. ESP COURSE DESIGN FOR STUDENTS FROM DIFFERENT DEPARTMENTS OR STUDY PROGRAMS

2.1. General Concepts

In the current practice of teaching ESP at the university level, it is often common for students from different departments or study programs, with different professional or vocational orientations to be grouped for ESP lessons. This can occur due to a variety of reasons, such as an uneven number of students from each department or study program, a limited number of allocated lessons per week, or practical limitations in classroom organization.

The design of an ESP course syllabus for such groups of students is generally a unique challenge for teachers, involving students from different backgrounds and with varying language needs, which have to be taken into account when designing the ESP syllabus.

"Needs analysis, carried out to establish the "what" and the "how" of a course, is the first stage in ESP course development, followed by curriculum design, materials selection, methodology, assessment, and evaluation" (Flowerdew 2013: 325). Within the statement, the term needs analysis "refers to the techniques for collecting and assessing information relevant to course design" (Hyland 2006: 73).

In the case of the ESP course in question, the ideal first step is the assessment of the language needs of each student. This involves determining their level of English proficiency, their professional or vocational field (related primarily to the department or study program, and their specific language needs in that field). The assessment should be conducted at the beginning of the program, and the results should be used to assist in the design of the syllabus. Once the language needs of each student have been assessed, the next step is to design a syllabus that meets the needs of the entire group. This requires balancing the language needs of individual students with the overall needs of the group.

A syllabus that is too focused on one particular field may not be suitable for students from other fields, while a syllabus that is too general may not be effective in meeting the specific needs of any student.

To design an effective ESP syllabus for mixed groups of students, the teacher has to have a thorough understanding of the language demands of each professional or vocational field represented in the class. This will allow the design of activities and tasks that are relevant to each student's needs, while also ensuring that the syllabus is accessible to all students.

The syllabus should also include a mix of activities for the development of language skills, including reading, writing, listening, and speaking. The activities should be designed to develop the language skills required for effective professional communication in each student's field. This may involve tasks such as reading and analysis of professional texts, different forms of academic and professional writing, participation in simulated professional discussions or presentations, and giving oral presentations. It should also contain exercises in translation from and into English, as well as students' involvement in some forms of digital content creation.

It is also important to consider different learning styles of each student. Some students may prefer hands-on, experiential learning activities, while others may prefer more traditional classroom-based activities. The syllabus should include a combination of activities that cater to different learning styles, allowing all students to participate and engage with the material.

The criteria for evaluation and examination should also be clearly defined and tailored to follow the contents of the syllabus, as well as the objective needs of students concerning their professional or vocational orientation. Concerning that, the examination materials should be carefully planned and created.

The designed ESP syllabus should be regularly reviewed and evaluated to ensure that it is meeting the needs of the students. This can involve regular feedback from students, as well as formal evaluations of the syllabus. If changes are needed, they should be made based on the feedback and evaluations received. By regularly reviewing and evaluating the syllabus, teachers can ensure that the ESP program remains effective and relevant for all students.

To give details regarding the design of an ESP course which is a central topic of this paper, it is necessary to present some general information on the course, within its institutional and educational context.

2.2. General Information on the Course

The planned ESP course is implemented at the Faculty of Philosophy, University of East Sarajevo, and intended for students enrolled in the following study programs: Journalism, Pedagogy, Psychology, General Literature and Theatre Studies, and General Literature and Librarianship.

The total duration of the course is four semesters. It is divided into four subjects (English Language 1, 2, 3, and 4), corresponding to the first two years of study. There are 15 weeks per semester, with two lessons (90 minutes) per week. The subjects are compulsory and form an integral part of the curriculum for students in the mentioned study programs.

The primary focus of the ESP course is to develop students' abilities to communicate effectively in English in a range of professional situations and to help them in acquiring

specific vocabulary, terminology, and skills required for their chosen field. In terms of implementation of the teaching process, it includes language classes in combination with guided workshops, discussions, and other interactive activities that will provide students with opportunities to practice their language skills in context. It implies the use of a variety of methods and tailored and prepared materials for the students to improve their language skills, including, primarily, customized textbooks, but also different audio and video materials, and online resources. Additionally, the course includes assessments and evaluations to track students' progress and provide them with feedback on their performance and final grades.

Finally, a significant part of the course is its online component, created in Moodle LMS, especially relating to homework and other extracurricular activities, but also very useful for students' learning and examination preparation at home and teacher's supervision and monitoring of the work and progress of each student enrolled in the course.

3. COURSE DESIGN

3.1. Course Components

The designed ESP course for the groups consisting of students from different departments within humanities and social sciences consists of four subjects: English Language 1, English Language 2, English Language 3, and English Language 4. Since the course, together with all the teaching materials, has to be prepared before the beginning of an academic year, it is not possible to design it after the assessment of the students' language knowledge and needs. Instead, the design is performed based on the teacher's knowledge, research, and experience, and the fact that all students included in the course have been learning English as a foreign language during primary and secondary school. However, the mentioned assessment takes place at the very beginning of the course and serves as a useful guide regarding the ways in which the course and materials should be used and adjusted.

The course focuses on improving students' proficiency in the English language by providing them with a comprehensive syllabus that covers all the core language skills of reading, speaking, listening, and writing. It is designed to be hands-on and interactive, giving students opportunities to engage with relevant textual and audiovisual materials to reinforce their understanding of language.

The work on such an engagement in all four mentioned language skills is an essential part of the teaching process in all four subjects, with the use of appropriate textual and audiovisual materials. In addition to that, English Language 1 and 2 also focus on building and alignment of the students' grammar skills. Namely, due to differences that exist between students in their previous knowledge of the English language, gained during primary and secondary education, students are given an opportunity to review or learn the fundamental rules and structures of the language, primarily regarding morphology and basic syntax, and how to apply them in various contexts. Such an overview of grammar is balanced and implemented on the basis of the initial assessment of students' language skills performed at the beginning of the course. On the other hand, English Language 3 deals with translation, which is an essential skill for students who need to translate between English and their native language for professional or academic purposes. The students learn how to translate written and spoken materials from one language to another accurately and effectively. Finally, English Language 4 builds on the skills developed in the previous subjects and puts emphasis on professional and academic writing, as well as digital content

creation. The students learn how to write different forms of academic and professional documents, and how to create digital content for different platforms and audiences.

Table 1 Course components

COURSE COMPONENTS		
English Language 1	reading, speaking, listening and writing (based on textual and audiovisual materials)	grammar
English Language 2		
English Language 3		translation
English Language 4		writing (professional and academic) content creation

3.2. Selection of Textual Materials

Selection of textual materials for the created ESP course is based on the general criterion of authenticity, which means that the texts should be written by native speakers of the English language and reflect real-life language use. This is significant for ensuring that students are exposed to the kind of language they are likely to encounter in real-life situations, such as in the workplace or academic settings. It is also important that the texts are appropriate for the level of the certain subject within the course. To ensure the quality of the materials, the teacher may edit the texts if necessary.

For the subjects English Language 1 and 2, the texts are 500-1000 words in length and at the intermediate or upper intermediate level. This implies that the texts should challenge students' language skills while still being within their knowledge reach. Their content is relevant both to the level of the students' English knowledge and the professional aspect of their study and should provide opportunities for them to practice and improve language skills purposefully.

For English Language 3 and 4, the texts are 1000-1500 words in length and at the upper intermediate or advanced level. These texts require students to have a higher level of language proficiency and provide them with opportunities to apply their language skills to more complex and sophisticated materials.

The sources of the texts are various and include the Internet, professional books, textbooks, articles, journals, magazines, and papers. They have to be carefully selected to ensure that the materials are of high quality and relevant to the students' needs, skills, and knowledge.

Corresponding to the departments the students of which have been included in the course, the specific topic areas for the texts include pedagogy, psychology, literature, theatre, journalism, and librarianship. These topic areas are chosen to reflect professional and academic interests of students and to provide opportunities for students to engage with materials that are relevant to their careers and academic pursuits. On the other hand, the common topic areas that are covered in the materials include education, film, music, art, language, politics, science, environment, technology, and the Internet. Due to their universality and relevance, these topics have been chosen to reflect broader cultural and societal context in which students will use their language skills and provide opportunities for students to engage with a wide range of materials that are relevant to their lives.

Table 2 Selection of textual materials

SELECTION OF TEXTUAL MATERIALS					
Authentic texts written by native speakers, edited if necessary.					
Subject	Length in words	Difficulty	Sources	Topic areas	
				specific	common
English Language 1	500-1000	intermediate/ upper intermediate	Internet books textbooks articles journals magazines papers	pedagogy psychology literature theatre journalism librarianship	education film music art language politics science environment technology internet
English Language 2	500-1000				
English Language 3	1000–1500				
English Language 4	1000–1500	upper intermediate/ advanced			

3.3. Selection of Audiovisual Materials

When selecting audiovisual materials for the ESP course it is also necessary that the focus is on materials that are authentic and written and narrated by native speakers. It is also important to ensure that the materials are suitable for the intended student audience and meet the needs of the course.

For the first subject, English Language 1, the materials are up to 7 minutes in length and on the intermediate or upper-intermediate level. Similar criteria apply for English Language 2, too, with the difference that the duration of the materials is up to 10 minutes.

Regarding English Language 3, the materials are up to 15 minutes in length and on the upper-intermediate or advanced level. Finally, the audiovisual materials used for English Language 4 are within the same range of levels and are up to 20 minutes in length.

Possible sources for these materials include audio and video streaming platforms such as Spotify, Google Podcasts, YouTube, and Vimeo. In terms of the specific topic and general topic areas, everything is the same as in the selection of textual materials. Thus, specific topic areas include pedagogy, psychology, literature, theatre, journalism, and librarianship, while common topic areas cover education, film, music, art, language, politics, science, environment, technology, and the Internet. It is important to select materials that are engaging and relevant to the students' interests and needs to enhance their learning experience.

Table 3 Selection of audiovisual materials

SELECTION OF AUDIOVISUAL MATERIALS					
Authentic materials written and narrated by native speakers.					
Subject	Length	Difficulty	Sources	Topic areas	
				specific	common
English Language 1	≤ 7 min	intermediate/ upper intermediate	audio and video streaming platforms	pedagogy psychology literature theatre journalism	education film music art language politics science environment technology Internet
English Language 2	≤ 10 min				
English Language 3	≤ 15 min				
English Language 4	≤ 20 min	upper intermediate/ advanced			

3.4. Grammar

As it has already been stated, part of the teaching process in the subjects English Language 1 and 2 is focused on building and alignment of the students' grammar knowledge and skills. In that context, the students have the opportunity to review or learn the essential concepts of English grammar (morphology and basic syntax) and how to apply them in different contexts and situations.

In English Language 1, the focus is on several key areas of grammar that are essential for effective communication in English. The primary units covered in this subject include word order in statements, questions and negatives, types of sentences, nouns, verbs and tenses, adjectives and adverbs, articles, conjunctions, prepositions, passive voice, and direct and indirect speech.

The discussion on word order in statements, questions, and negatives focuses on the rules and conventions of English grammar that dictate the order of words in a sentence. This includes the subject-verb-object (SVO) word order in statements, the inversion of the subject and auxiliary verb in questions, and the negative particle placement in negatives. It also covers the four main sentence structures in English, including simple, compound, complex, and compound-complex sentences, as well as sentence punctuation and how it affects meaning in a sentence.

Nouns are presented in terms of their general and specific features, including common and proper nouns, singular and plural nouns, and possessive nouns. Verbs and tenses are observed through conjugation, including past, present, and future tenses, and their proper use. The part on adjectives and adverbs covers roles and functions of these words in a sentence, including their placement and order in relation to other words, while, within the talk about articles, the use of definite and indefinite articles is elaborated. The discussion on conjunctions implies the different types of conjunctions, including coordinating, subordinating, and correlative conjunctions, and how they connect clauses in a sentence, while the prepositions are observed through their functions and the ways in which they indicate relationships between words in a sentence.

Passive voice is demonstrated through its structure and use, while the topic on direct and indirect speech explains the rules and conventions for reporting speech in English, including the changes of tenses and pronouns which happen in indirect speech.

In English Language 2, the covered grammar includes conditional sentences, modal verbs, and verbals. Conditional sentences are observed through their structure and use, including zero, first, second, third, and mixed conditionals. The discussion on modal verbs covers their functions and uses. Finally, verbals (infinitives, gerunds, and participles) are presented through their functions and use, with a special focus on how they act as nouns, adjectives, or adverbs in a sentence.

Table 4 Grammar

English Language 1	English Language 2
GRAMMAR	
word order types of sentences nouns verbs and tenses adjectives and adverbs articles conjunctions prepositions passive voice indirect speech	conditional sentences modal verbs verbals

3.5. Translation

Translation is the crucial component of the teaching process in English Language 3 lessons, and, as such, it deals with several critical concepts and techniques that are essential for an effective translation from and into English.

It begins with an introduction to the concept of terminology, including the definition of terminology and the importance of terminology in the field of translation. This section also covers the basics of terminology management, including the creation, organization, and use of terminology databases.

The next significant section covers the basics of translation from and into English, including steps involved in the translation process, such as analysis of the source text, finding an appropriate equivalent in the target language, and evaluation of the quality of the translated text. It also discusses the importance of cultural adaptation and how it affects the quality of the translated text. Problem solving is also there, implying the various problems that may arise during the translation process and the ways how to solve them effectively, including identification and resolution of linguistic, cultural, and technical problems.

Another section deals with the use of dictionaries in the translation process, including different types of dictionaries and how to use them effectively, with an emphasis on the importance of using specialized dictionaries to achieve quality translations. In the same context, the use of Google Translate in the translation process is mentioned, including its limitations and potential dangers, as well as the use of other Internet resources, including artificial intelligence tools, online dictionaries, translation forums, and machine translation tools.

Finally, the importance of proofreading in the translation process is stated, with advice and instructions on how to proofread a translated text effectively. It includes the identification and correction of grammar, spelling, and punctuation errors.

3.6. Writing

Part of the ESP course, within English Language 4, dealing with academic and professional writing is designed to help students improve their writing skills and prepare them for the demands of the professional world. It covers a range of essential components of writing for a professional context, such as job application, CV, biography, request, motivation letter, report, review, overview, interview, essay, abstract, article, and paper. The purpose of each of these types of writing is taught, together with the components that make up each type, and the techniques for writing each of them effectively. Additionally, the focus is also on tone, proofreading, and other important aspects of writing which contribute to the quality of written work. The idea is that the students learn how to communicate effectively in a professional context, developing skills and knowledge, through a combination of theoretical instruction, practical exercises, and group activities.

3.7. Digital Content Creation

Another part of the ESP course, within English Language 4 is dedicated to digital content creation. The term “digital content creation” implies the creation of digital content in different textual and/or multimedia forms and formats that can be used for educational or commercial purposes, and its distribution through the Internet. Within an ESP course it can be beneficial in many different ways and thus contribute to various aspects of language comprehension and knowledge improvement, such as vocabulary, grammar, writing, speaking, overall

communication, and presentation skills. Also, on a higher language use level, by incorporating digital content creation into the ESP syllabus, students can develop a range of practical language skills, such as research and writing skills, presentation skills, and critical thinking skills, as well as technical skills in using digital tools and media.

On the basis of the overall students' needs, capacities, language skills, computer skills, software and hardware availability, the digital content intended to be created includes: PowerPoint presentation, online questionnaire, personal website, blog, video presentation, video tutorial, and podcast. Depending on the format and form of digital content, this can be done individually or in groups.

Table 5 Translation | Writing | Digital content creation

English Language 3	English Language 4
TRANSLATION	WRITING DIGITAL CONTENT CREATION
Concept of terminology Translation from English Translation into English Problem solving Use of dictionaries Use of Google Translate Use of the Internet resources Proofreading	Job application Request CV Biography Motivation letter Report Review Overview Interview Essay Abstract Article Paper PowerPoint presentation Questionnaire Personal website Blog Video presentation/tutorial Podcast

3.8. Components of Teaching and Learning Process

All the components and elements mentioned and described in the previous text together participate in the teaching and learning process within an ESP course. The process comprises two components: classroom work and homework. The classroom work in all four subjects includes reading, watching and/or listening, discussion, analysis, and exercises based on textual and/or audiovisual materials, together with subject-specific work on grammar, translation, and writing. Homework is more dedicated to the latter, and, due to the time limitations imposed by the curriculum, provides opportunities for students' more detailed involvement in time-consuming issues such as grammar exercises, exercises based on textual and audiovisual materials, translation, writing, and digital content creation.

Table 6 Components of teaching and learning process

COMPONENTS OF TEACHING AND LEARNING PROCESS			
Subject	classroom work		homework
English Language 1	Reading Watching and/or listening	Grammar lessons and exercises	Grammar exercises Exercises based on textual and audiovisual materials
English Language 2			
English Language 3	Discussion, analysis and exercises based on textual and/or audiovisual materials	Translation	Translation Exercises based on textual and audiovisual materials
English Language 4		Writing	Writing Digital content creation (individual and/or group) Exercises based on textual and audiovisual materials

3.9. Online Component of the Course

The online component of the course is created in Moodle CMS and hosted on the location <https://moodle.etf.ues.rs.ba/>, with individual online courses made for each subject, where all course materials, including the exercises, are both downloadable and directly accessible. All students are registered on the site, instructed, and obliged to complete the exercises and submit all sorts of homework through the appropriate online courses. More details on the creation and the contents of an ESP online course created in Moodle can be found in (Kovačević 2021) and (Kovačević 2022).

3.10. Examination and Evaluation Components

In the created ESP course, components for examination and evaluation have been defined based on the objective needs and expected learning outcomes. The components which are common for all four subjects are: attendance, activity during lessons, written tests based on textual and audiovisual materials, oral exams based on textual and audiovisual materials, and homework. Depending on the content of individual subjects within the course, there are also grammar tests (English Language 1 and 2), tests in translation from and into English (English Language 3), and essay writing (English Language 4).

Table 7 Examination and evaluation components

EXAMINATION AND EVALUATION COMPONENTS			
English Language 1	Attendance	Grammar test	Homework
English Language 2	Activity during lessons		
	Written test based on textual and audiovisual materials	Translation from English Translation into English	
English Language 3	Oral exam based on textual and audiovisual materials	Essay	
English Language 4			

4. CONCLUSIONS

The design of an ESP course for groups consisting of students from different departments within the Humanities and Social Sciences is a complex and challenging task. However, with careful planning and consideration of various factors, it can be a highly rewarding experience for both students and teacher(s) involved.

The advantages and benefits of such a course include an opportunity for students to interact with individuals from diverse backgrounds and disciplines, exposure to new ideas and perspectives, and development of interdisciplinary skills that are highly valued in today's rapidly changing world. Additionally, such a course may contribute to fostering a sense of community and collaboration among students, promoting a more inclusive and diverse academic environment.

However, there are also risks and potential problems associated with the design of such a course. For example, it can be difficult to find common ground between students from different departments, align their knowledge, and ensure that everyone's needs and expectations are met. There may also be challenges in developing a course syllabus that is both comprehensive and accessible to all students.

Despite that, the design of such an ESP course could be an important step in the promotion of interdisciplinary education and the preparation of students for a rapidly changing world. With careful planning and consideration of the advantages, benefits, risks, and potential problems, such a course, as a final design result, presents a useful and efficient tool for a successful and productive implementation of the ESP teaching and learning process.

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Review research paper

ELP/LE FOR THE JUDICIARY: INTEGRATED INSTRUCTIONAL DESIGN FOR AUTHENTIC LEARNING

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Abstract. *This paper provides an insight into the instructional design of several tailor-made ELP/LE courses developed within the JA Project: English for the Judiciary (2017-2020). The courses were designed for adult working professionals from several judicial institutions in the City of Niš, organized at three CEFR proficiency levels, and held at the Judicial Academy Niš in the period 2018-2020. After a brief overview of the instructional design framework, the article outlines the major stages in the ELP/LE instructional design process, particularly focusing on the design and classroom practices in B1+/B2 and B2+/C1 courses. Based on the provided insights, the author examines the encountered challenges, learner benefits and considerations for prospective development of similar authentic learning courses for a wider discourse community.*

Key words: *Legal English, judiciary, integrated instructional design, authentic learning.*

1. INTRODUCTION

The judiciary is one of the priorities in the EU integration process, particularly in view of ensuring judicial cooperation with EU Member States and harmonizing judicial practices with EU standards. English for Legal Purposes (ELP) or Legal English (LE) has been an integral part of EU judicial education and training since 2011 (EJTN, 2012: 29).¹ As ELP/LE courses for the judiciary are quite rare in Serbia, the paper provides an insight into the instructional design of several tailor-made ELP/LE courses developed within the *Judicial Academy Project: English for the Judiciary* (2017-2020) and held on the premises of the Judicial Academy Niš² in the period 2018-2020. The ELP/LE courses were designed for adult judicial professionals (judges, prosecutors/deputy prosecutors, judicial/prosecutorial assistants, and JA trainees) from several institutions in the City of Niš,³ organized at three CEFR proficiency levels (A1-A2, B1-B2, B2-C1), and delivered within the two-year project period. The JA Project was the result of cooperation between

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¹ For more on LE training programs, see the European Judicial Training Network (EJTN, 2019).

² For more on the Judicial Academy activities, see: Pravosudna akademija/JA, 2022.

³ The Basic/Municipal Court, the High/County Court, the Appellate Court, the Basic Prosecution Office, the Higher Prosecution Office, and the Judicial Academy in the City of Niš (Serbia)

several public, educational and judicial institutions,⁴ and close collaboration of the core course-development team⁵ (JA Project Proposal 2017).

The JA Project objectives were: a) to develop learners' content knowledge, communicative and professional competences; b) to facilitate the acquisition of learner/learning skills, transferable life skills for self-study, use of professional literature and resources; c) to support their professional development and participation in international seminars, projects, conferences; d) to strengthen their participatory capacity in judicial cooperation within the EU integration process; d) to promote learner autonomy and life-long learning for professional purposes (JA Project Proposal 2017). The instructional design was based on the tenets of the *Integrated Communicative Learning*,⁶ authentic law-and-language learning⁷, promoting the development of global and digital competences, and comprehensive inquiry-based instructional design approach.

Instructional design (ID) is *a scientific discipline* which applies different tenets of *learning, curriculum design, and instructional design theories* (Reigeluth, 2001:12-14)⁸ to specify different stages and procedures in the multidimensional *process* of planning, devising, developing, managing, implementing and evaluating learner/learning-centered instruction the context-driven (Wagner, 2018:2) by using different ID approaches⁹. The goal/process/performance/product-oriented instructional design is a collaborative effort to provide a meaningful, dynamic, adaptable and effective instruction, based on prior research, inquiry-based needs and goals analysis, a flexible and effective delivery system (instructional goals/outcomes, strategies, materials, procedures, educational technology; lesson planning, classroom management, assessment, evaluation), and effective implementation and intervention (Morrison, Ross, Kalman, Kemp, 2012:6-7). As such, it is the key instrument in creating meaningful, interactive and challenging learning environments promoting communication, collaboration, critical thinking and creativity.

In this paper, the author shares the valuable experiences and insights from the *JA Project: ELP/LE for the Judiciary* (2017-2020), aimed at facilitating authentic learning for adult working professionals in the workplace-based learning context, The paper sums

⁴ The JA Project included: the Faculty of Philosophy Niš/English Department (project holder), the Judicial Academy Niš (beneficiary), the US State Department (sponsor), US Embassy Belgrade/Cultural Office (coordinator), the Regional English Language Office/RELO Belgrade (support/supervision), and a team of ELT/ESP/ELP/LE practitioners.

⁵ The core project team included: an external LE Specialist/expert in LE instructional design, an ELT/ESP lecturer from the English Department, an ESP/ESS lecturer from the English Language Center at the Faculty of Philosophy Niš, an ESP/ELP/LE lecturer from the Law Faculty Niš, and the project initiator—a Municipal Court judge as the representative of the discourse community.

⁶ For more on the Integrated Communicative Learning in ELP/LE, see: Ignjatović, 2020. This approach has been embraced by EU institutions committed to high-quality LE training (e.g. EULETA/EU Legal English Teachers Association, ERA/European Law Academy, EJTN/European Judicial Training Network, Translegal/International Legal English/ILEC) (E-Justice, 2022).

⁷ For more on Authentic Learning in ELP/LE contexts, see: Ignjatović 2020: 373.

⁸ *Learning theories* (behaviorist, cognitive, constructivist, communicative, collaborative) provide theoretical/pedagogical/methodological descriptions of different aspects of learning. *Curriculum design theories* provide the structural framework for putting theory into practice (content knowledge/competences/values; goals/objectives/outcomes; syllabus/material selection, design, development; assessment). *Instructional design theories* develop practical step-by-step approaches to delivering effective instruction and optimizing performance (Reigeluth, 2001:12-14).

⁹ ID models (ADDIE, ASSURE, Backward Design, Universal Design for Learning, etc.) reflect different instructional design considerations: e.g. ADDIE (analysis, design, development, implementation, evaluation); for more, see: Educational Technology, 2015.

up the major instructional design stages (Needs Analysis, Curriculum/Syllabus/Material Design, Lesson Planning, Course Implementation, Assessment and Course Evaluation), with specific reference to instructional practices in B1+/B2 and B2+/C1 courses. Based on the course evaluation results and final project results, the author indicates the key challenges, benefits and considerations for prospective instructional design in developing similar ELP/LE courses for a wider discourse community.

2. INSTRUCTIONAL DESIGN IN THE JA PROJECT: ELP/LE FOR THE JUDICIARY (2017-2020)

The JA Project: ELP/LE for the Judiciary was initially envisaged as a one-year project (2018-2019), which was to include two ELP/LE courses (at B1 and B2 level) held over two semester.¹⁰ However, as the initial analysis revealed that many applicants were false beginners, the sponsors approved three courses (at A1, B1 and B2 CEFR). Based on the learners' interest and course evaluation results, the JA Project was subsequently extended (by sponsor's courtesy) for another year (2019-2020).

This part of the article outlines the major stages in the instructional design within the *JA Project: ELP/LE for the Judiciary* (2017-2020), including an overview of activities. For structural clarity, the elaborate process will be presented within three subheadings: 1) Pre-Implementation stage, 2) Implementation stage, and 3) Post-Implementation stage.

2.1. Pre-implementation Stage (October 2017- January 2018)

The core project team first met in early October 2017 to discuss the project proposal (stakeholders' interests, learner profile, plan, goals, curriculum, materials, assessment), schedule events for the initial stage, make arrangements and assign individual tasks.

The Pre-Implementation Stage included three correlated phases and related activities, aimed at collecting quantitative/qualitative data to inform curriculum/syllabus/material design.

I Data-based Research and Inquiry-based Analysis

1. **Preliminary Survey (PS)** on prospective learners' interests in ELP/LE courses;
aim: to check on interest and self-assessed proficiency level
2. **Collecting sample materials:** legal texts, documents, cases, videos, online resources;
aim: to perform initial genre analysis, text/language/competence analysis, task analysis;
3. **Needs Analysis (NA):** preparation, revisions, distribution, data collection and analysis;
aim: to collect data on prior learning, needs/wants, likes/preferences, expectations;¹¹
4. **Focus Group Meeting** at JA with prospective learners: *aim:* to introduce the project; make arrangement for PT and OI; promote collaborative mindset, discuss interests, etc;
5. **Placement Test (PT):** preparation, revision, distribution, grading, ranking into groups;
aim: to check on learners prior knowledge for preliminary grouping;¹²

¹⁰ The course design specifics included: 60 one-hour classes (15 weeks, 2 hours/week, 30h/term) over two semester (January-June 2018, September 2018-January 2019), minimum 15 learners per course.

¹¹ The extensive *NA Questionnaire* included: 1) Personal data; 2) Previous EL learning; 3) Current/future EL use; 4) Learner/Learning needs; 5) ELP course needs: a) GE skills; b) Academic English; c) Legal English; d) Professional Skills; 6) Assessment: Tests, Grading; 7) Comments.

¹² The *Placement Test* (60 pts) included: 1) GE Grammar & Structures (A1- C1): multiple choice (40 pts); 2) ELP Reading Text: Trial by Jury-multiple choice (20 pts).

6. **Semi-structured Oral Interview (OI):** preparation, revision, interviews, grouping; *aim:* to check on communication proficiency, fluency, accuracy, interaction; double-check the CEFR level; fine-tune grouping (for borderline learners: A2/B1, B1/B1);¹³
7. **Focus Group Meeting with LE Specialist and RELO Officer:** final check on NA findings, professional needs/interests, commitment, text types, integrated approach, etc.

Based on the extensive assessment (PT, OI), learners (N=81 in total) were grouped into relevant courses (A1=26; B1=28; B1+/B2=26). The inquiry-based analysis (NA, FGMs) provided valuable insights for further present and target learning analysis in each group.

II Teacher Training and Curriculum/Syllabus/Material Design (team work)

The next step was the *Teacher Training* (TT) with external LE Specialist, which was a platform from ESP knowledge and experience exchange, promoting the collaborative mindset, getting the core team members on the same page in terms of ELP/LE theory, methodology, pedagogy and practice, and tackling *Curriculum/Syllabus/Material design* issues. To this effect, the TT Agenda included discussions on a range of relevant topics:

1. **Course contents:** Ls interests, content areas, social/legal issues, legal topics, procedures; exploring, gathering and selecting relevant materials; legal genres, types of texts (newspaper/academic articles, cases, legal documents, judgments, reports, charts, videos);
2. **Course goals/objective/outcomes and forms of assessment:** a) general goals (communication, integrated skills, functional grammar), b) specific goals (academic, research, digital skills), c) professional goals (legal terms, genres, lawyer skills, legal culture.); d) formative/summative assessment (tests, quizzes, feedback, performance checklists-rubrics);
3. **Theoretical/methodological/pedagogical considerations:** genre and corpus analysis; communicative competences, discursive (lawyer) skills, global competences, transactional life skills; learner/learning skills; adult learning issues;
4. **Educational technology:** use of technology, available online resources (cases, documents, YouTube videos, Ted Talk presentations); PowerPoint presentations; digital skills (legal research), legal databases (EUR-Lex, HUDOC training); digital tools (Quiz let, Jeopardy);
5. **Curriculum design approach and procedures:** course structure, sequencing contents, setting goals/outcomes; lesson planning, activity types (integrated skills, functional grammar, social/professional communication, role-play, problem-solving, case studies, presentations, scenarios, projects); learning strategies; classroom management; assessment and evaluation;
6. **Course syllabus:** integrated syllabus: content/topic/task/skills/function-based; authentic content/competence-based approach; listing goals/outcomes, sequencing topics, activities, integrated receptive/productive skills, functional grammar; legal culture, lawyer skills;
7. **Material selection, development and adaptation:** a fair balance of GE, Academic English and LE contents/skills/values; variety of relevant manageable material); sequencing (by week); text adaptation or support (transcripts, subtitles) for lower levels;
8. **Lesson planning and Activities:** lesson structure, sequencing activities, task analysis; classroom management; variety of tasks/activities, reference charts (e.g. language functions, grammar) and samples (letters, conversation strategies, etc.);
9. **Assessment and Evaluation:** evidence-based learning, summative/formative assessment: tests, quizzes, revision games; checklists, rubrics, graphic tools; self/peer evaluation, etc.

¹³ The *Oral Interview* (40pts) included: 1) Interview questions; 2) A1-C1 speaking descriptors; 3) Checklist (structures, vocabulary, interaction); 4) Assessment Sheet (1-5); 5) Ranking scale (A1-C1).

Considering that instructional design is goal/process/performance/product-oriented, course/syllabus/material development is a dynamic, flexible and negotiated process. Learner needs vary and present/target learning situations impacts instructional decisions. As nothing is set in stone, instructional design should allow for necessary change, adaptation, revision and fine-tuning. Thus, the general course/syllabus/material design structure and the common core syllabus produced by the project team in TT sessions was just a general framework (with guidelines) for further development of course-specific syllabi in line with the instructional situation observed in each course.

III Curriculum/Syllabus/Material Development for B1+/B2 and B2+/C1 courses

Relying on this elaborate structural framework, each course facilitator was to revisit the NA results for a specific group, conduct further analysis, revise the draft curriculum, create the course syllabus and develop/adapt the materials and activities to the specific proficiency level and learner needs, goals and interests. This section illustrates the Course/Syllabus/Material Development for B1+/B2 and B2+/C1 groups.

At intake, the NA analysis on B1+/B2 learners yielded the following results:

- a) *Target Learner Analysis* (TLA): relatively consistent age group (25-40), highly motivated mixed ability learners; different professional profiles (3 judges, 3 prosecutors, 10 assistants, 10 trainees) from different institutions (courts, prosecution, JA) with heavy workload; different professional interests (criminal/civil law, international/EU law, human rights) for current/prospective GE/EAP/LE purposes; dislike of summative assessment (formal tests);
- b) *Present Situation Analysis* (PSA): different prior GE/LE exposure, learning gaps; different perceptions on strengths/weaknesses, different communicative competences, some/no exposure to academic/professional skills; insufficient awareness of lexical/genre/discourse analysis, GE/AE/LE writing conventions; different learning styles, strategies, motivation, engagement; possible assignment completion issues, classroom management/dynamics, power relations; need for highly practical, meaningful, authentic, differentiated/negotiated learning;
- c) *Learning Context Analysis* (LCA): face-to-face instruction on the JA premises, traditional classroom (desks), low-tech environment (laptop, loudspeakers, Flip chart/whiteboard OHP), no stable Internet; paper-based instruction (handouts) supported by computer-based PPT presentations and some JA tech support; classes within working hours (at 8am or 14pm); strict observance of one-hour class time due to Ls busy daily routine and JA training timetable.

In addition to multidimensional law-and language contents (GE, EAP, LE), discursive competences and learner/learning considerations, the analysis revealed ample challenges that had to be accounted for in devising the relevant instructional approach. In order to provide highly meaningful, practical, authentic learning for adult working professionals, there was a need to incorporate the tenets of adult learning (andragogy)¹⁴ and different instructional design approaches. Thus, the Course/Syllabus/Material Design for B1+/B2 and B2+/C1 courses was based on the **Integrated Instructional Design** approach, which entails a number of theoretical, methodological, pedagogical and practical underpinnings:

¹⁴ For a summary on andragogical approach to adult learning, see: Bugreeva, 2019: 414-419.

1) Integrated approach to course design:

- **Integrated communicative learning:** eclectic and holistic learning approach: content-based, task-based, experiential learning, integrated-skills, functional grammar);
- **Learner/learning-based instruction:** relevant methodology and andragogy; “learner training”, “learning to learn” skills; learner independence and autonomy;
- **Authentic learning:** meaningful, purposeful learning for real-world purposes (authentic methodology, goals/outcomes, material/activities, competences/practices, assessment);
- **Negotiated learning:** consider Ls preferences, choices, feedback; issues/difficulties
- **Differentiated learning:** flexible, individual approach to material design, lesson planning, diversity of tasks/activities, taking into account different likes/wants/interests;
- **Evidence-based learning:** reliable, measurable summative/formative assessment tools
- **Developing digital competences:** use of technology for real-life professional purposes.

2) Integrated approach to syllabus design: the Integrated Syllabus

Instructional design inevitably makes use of several types of syllabi: in GE, it entails linguistic/functional/notional/content/topic/task/skills/learning-based syllabi; in ESP, the list is further embellished by specific lexical/genre/discourse-based syllabus components. In order to facilitate meaningful and effective authentic law-and-language learning, B1+/B2 and B2+/C1 courses were based on the **Integrated Syllabus** for several reasons:

- *pragmatics and flexibility for negotiated learning:* it offers an opportunity to introduce eclectic elements of different syllabus types (as needed) and a flexible approach to negotiating the teaching/learning process by taking learners’ perspectives into account;
- *multiple options for meaningful & differentiated learning:* a syllabus should reflect careful consideration, planning, integration of requisite content/competences/values by taking into account the specific circumstances, needs, preferences, individual differences;
- *tentativeness:* it sets the “approximate” learning journey; it may anticipate problems and set criteria and procedures for handling them but it is a model or “a statement of an ideal” (Hutchinson, Waters 1987:84); which will further evolve in the implementation stage;
- *the right balance for overall satisfaction/achievement:* it enables striking the proper balance between all components in creating a meaningful, practical, authentic instruction and constantly adjusting the initial syllabus to the in-course teaching/learning circumstances.

Given the diversity of content-specific interests expressed in NA (criminal/civil law, international/EU law, human rights), the integrated syllabus in the first term (January-June 2018) was based on an overarching topic (*domestic violence*) for all groups. This “easy start” was expected to provide sufficient latitude for addressing different aspects of law-and-language learning in all preferred legal areas, bridge the divide between different interests and ensure equal satisfaction by focusing on a relatively undemanding legal context, personalize and contextualize the issue by referring to the Serbian contexts, experiences and professional needs. It also provided sufficient space to revise the basic GE structures, introduce basic LE terminology, and focus on key professional skills. It also contributed to group building and cohesion, overcoming initial psychological hurdles pertinent to adult learning, and provided space for learner training, revisiting learning skills, integrated (reflective/productive) skills and functional grammar as the cornerstone for developing communicative, discursive and digital competences. Above all, it set standards for professional discussion, argumentation, exploring documents, case law, role-playing, etc. In the next term, the integrated syllabus included eclectic elements of content/topic/task/skills/function/competence-based syllabi, which focused on subject-specific areas of civil/criminal law, procedures in comparative legal systems (Serbian/EU), legal terminology, international documents and case law, global/discursive and digital competences (B1+/B2 Syllabus). In the second project year (2019-2020), the focus was

on the international issues in international criminal and civil law, professional development and judicial cooperation in civil and criminal matters, with specific reference to process and performance-based instructional approach (B2+/C1 Syllabus).

3) Mapping the B1+/B2 Syllabus: Sequencing learning events and activities

The next step was to produce a manageable course syllabus by sequencing integrated learning events into a logical order, incorporating all requisite elements: a) content areas, communicative competences (linguistic, socio-linguistic, strategic, discursive), transferable skills, global and digital competences, legal culture; b) instructional methodology (objectives/goals/outcomes, processes); c) resources for material/task development; d) summative/formative assessment tools (tests, quizzes, checklists, rubrics, self/peer evaluation); e) classroom management (interactions, grouping, difficulties, solutions); f) implementation considerations, adjustments, negotiated and differentiated instruction.

4) Material Design/Development & Lesson Planning

In ESP contexts, course/syllabus/material design and lesson planning are often driven by the collected material and available resources. These processes are correlated and constantly evolve in this interaction. They have to be systematic, logical and coherent, integrating all theoretical/methodological/pedagogical and pragmatic elements reflecting the holistic and humanistic teaching/learning process. To ensure purposeful and effective instruction, teachers commonly see material design in terms of *manageable lesson*: what is possible in the specific circumstances and given time. Lesson plans lay down the organization of the teaching/learning process but they are tentative as they may be further adjusted in line with specific goals, materials, learner/learning needs, observed difficulties, external/internal factors, etc. The key to good material design is “*chunking*”, organizing tasks in manageable chunks which are not stand-alone activities but integrated into a meaningful whole. Law commonly features lengthy texts (cases, judgments) which have to be split into manageable parts with different focal points (e.g. integrated skills: reading/listening followed by speaking/writing; functional grammar; lexical/genre/discourse analysis; legal argumentation, mock-trial simulation, etc.). Thus, material design and lesson plans in B1+/B2 and B2+/C1 courses were based on several approaches:

- a) **Authentic learning approach**: include authentic/discourse-specific content knowledge, competences, values; processes/methods/strategies, texts/tasks/activities, goals/assessment;
- b) **Learner/learning-based approach**: align material/ tasks/activities with learner/learning needs, taking into account possible challenges, internal and external factors, etc
- c) **Content-based approach**: explore the collected material and other resources, read texts and critically assess their practical value/applicability/adaptability (to a lower A1-B1 level); identify lexical, linguistic, structural, strategic, sociolinguistic, cultural, discursive, digital elements or text potentials (e.g. current ethical/social/cultural issues, affective impact, etc.);
- d) **Task-based approach**: make a logical/coherent sequence of manageable tasks; specify goals/aims, aligned aims with outcomes/assessment; correlate with tasks in the next unit;
- e) **Competence-based approach**: identify requisite competences, devise activities/tasks focusing on goals/outcomes and ensuring a good balance of communicative competences (socio-linguistic, discursive, functional, strategic), global/transferable life skills, digital competences; tasks should be practical, meaningful, educational, enjoyable, increasingly challenging (difficult), moving from reception to production and performance.

In the implementation stage, the developed materials, lesson plans and activities are further adjusted to specific teaching/learning circumstances, which calls for good classroom management skills, flexibility, patience, empathy and consideration of psychological/affective, personal/family, internal/institutional and external/social factors.

5) Assessment and Course Evaluation

Assessment is another essential element which has to be incorporated into the course/syllabus/material design, lesson planning and individual activities from the start. It entails diverse *forms of assessment* (formal/informal; ongoing/periodic; preliminary/mid-term/end-term; summative/formative; self/peer/teacher/group/panel assessment) and a range of *assessment tools* for weighing content-knowledge, competences and abilities at different stages of the process (reception, performance and production). Some of these *evidence-based learning* tools are: progress/final tests; quizzes, surveys/questionnaires; formal/informal feedback; checklists/rubrics; performance criteria/standards/procedures; individual/group/class assignments and discussions; etc. Notably, a vast majority of B1+/B2 learners explicitly opted to have no formal summative assessment (tests) and no formal grading (marks). The learners' choice may be explained by a number of reasons: no test pressure and frustration with negative results; traditional cultural attitudes to strict formal testing requirements; reluctance to be perceived as "pupils" who will be graded; wish to enjoy the learning process rather than compete with others; the habit of having professional seminars with rather relaxed attendance and participation criteria, where they are not graded but receive attendance certificates. Therefore, an additional challenge in B1+/B2 and B2+/C1 courses was to ensure evidence-based learning by devising alternative and flexible but still reliable and measurable formative assessment options.

Depending on learners' engagement and performance, the JA project envisaged the possibility of obtaining one of the two certificates: a certificate of completion (75% attendance and 60% task completion) or a certificate of attendance (50% attendance and 30% task completion). Thus, instead of being formally graded, learners had to meet the specific percentage requirements in order to be awarded a certificate. The B1+B2 and B2+/C1 courses included attendance sheet as a quantitative tool for recording attendance and a number of designated production/performance activities which were assessed by using diverse formative assessment tools, depending on the assignment-specific criteria. Although they did not have formal tests and grades, learners were exposed to different forms of formative assessment: periodic group (jeopardy-style) quizzes on content knowledge and skills; teacher-assessed class activity and writing assignments (letters, academic abstracts, case briefs); peer-assessed presentations and simulations (based on process-specific checklists or rubrics (genre moves); individual consultations/group discussions; formal/informal peer/teacher feedback; self-assessment (competency-based checklist); course evaluation surveys; etc. Thus, learners' production and performance were assessed throughout the teaching/learning process on the basis of completed assignments, which were transferred into percentages and used in rendering a data-based decision on whether the learner met the course criteria for being awarded a certificate.

Course evaluation is time for reflection on learning experience and performance. It is valuable for learners and teachers alike. It gives learners a chance to assess different aspects of the teaching/learning process by filling out mid-term/end-term surveys.¹⁵ It is also an opportunity to focus on processes, production and performance, to recall and

¹⁵ The B1+/B2 and B2/C1 Course Evaluation sheet included a number of indicators, which were assessed on 1-5 scale (course content/structure/organization: material, recourses, videos, handouts, tasks/activities; classroom management: learning atmosphere, teacher-students/student-student interactions; provided support/instructions/guidelines, teacher/peer feedback; personal progress/overall satisfaction) and an open-ended chart for comments (likes/dislikes/suggestions). The surveys could be submitted in paper form (unnamed) or sent via email (named). Most respondents sent them by mail.

critically evaluate applicability and effectiveness of provided instruction and one's own commitment, achievements and personal satisfaction. For teachers, it is crucial in terms of grooming learner awareness of instructional processes, putting learners in control and taking responsibility for their learning, and promoting mutual trust, partnership and collaboration which are highly important in adult classrooms. In B1+/B2 and B2+/C1 courses, evaluation results were also used as a starting point for discussion on observed problems and possible solutions. It was a chance to observe the challenges, regroup, remedy some shortcomings and address them in the forthcoming period. The learner group meeting at the outset of the second project year (2019-2020) was an additional opportunity to hear learner needs, negotiate content areas for prospective work and adjust the course/syllabus/material design, lesson plans, classroom management and assessment.

2.2. Implementation Stage: Classroom Practices in B1+/B2 course

Drawing on the course/syllabus/material design, the implementation stage included: lesson planning, material development, classroom management and practices.¹⁶ A typical *lesson plan* included: a warmer or introduction into the topic, content-specific reading/listening/watching task, discussing related social/legal issues, exploring functional grammar, lexical/genre/discourse analysis, production/performance activity. The instruction included various *types of integrated communicative learning activities* devised to cater for diverse student needs, learning aptitudes and multiple intelligences: a) Warm-up tasks (songs, visuals, videos); b) Vocabulary/Pronunciation tasks; c) Functional grammar tasks; d) Legal terminology (gap-filling, matching, ranking/ordering activities); e) Legal forms, reports, documents; f) Reading/listening/watching videos with note-taking, summarizing, drawing conclusions; g) Speaking: group discussions, mini-presentations; h) Homework assignments: individual/pair reading/listening, speaking/writing tasks; database search; i) Language games (revision quizzes, jeopardy, board games); j) Jigsaw activities: hypothetical cases/scenarios, role-play; k) Group/class projects and peer evaluation; l) Mock trial/Moot court simulations; etc.¹⁷ The authentic tasks/activities were sequenced from receptive to productive ones. Some of the student-generated materials (poster-presentations, abstracts, cases) were subsequently used for discussion, revision and error-correction purposes. Some of the culminating production activities were: letter writing, academic abstract writing, CV and Motivation Letter writing, case summary, content/competences revision quizzes, etc. Some of the culminating performance activities included: mini poster-presentations (Serbian courts), round table discussions (judicial cooperation), problem-solving scenarios (domestic violence), PTT presentations on a chosen EU/Serbian case, legal argumentation (case analysis), end-term Mock Trial project (B1+/B2 course) and Moot Court project (B2+/C1 course), where learners demonstrated a comprehensive set of discursive competences (legal research, case analysis, legal interpretation, legal argumentation/representation skills, legal reasoning, judgment/adjudication) in discourse-specific judicial contexts. Both courses endeavored to promote learners' awareness about life-long learning opportunities for the judiciary and ongoing

¹⁶ Some B1+/B2 course materials and activities were presented in the *ELP/LE Workshop: JA English for the Judiciary*, at the ESP Conference Niš, on 22 September 2022.

¹⁷ For more on authentic Integrated Communicative MI-based Activities, see: Ignjatović, 2017.

ELP/LE professional development opportunities provided via professional networks.¹⁸ In addition, all ELP/LE learners had a chance to attend several workshops given by guest lecturers.¹⁹ Both courses were subject to external supervision by the RELO officer and sponsor representatives, who visited and observed a number of classes.

For the purposes of this article, we may briefly refer to the quantitative results achieved in the B1+/B2 and B2/C1 courses over the two-year period. *Table 1* shows that more than half of the initial number of applicants completed each course (57,68% and 55%, respectively). In both courses, the number of learners who attained a certificate of completions is significantly higher than those who attained a certificate of attendance. As for the learners who were below the criteria or quit, the teacher's records shows that there were ample justifiable reasons why they could not keep up the pace.²⁰ On the whole, as all learners were busy professionals who had to handle the heavy professional workload, family circumstances and a new learning environment at the same time, they should be commended for their perseverance, resilience, commitment, achievements and the best efforts to keep up with the demanding B1+/B2 and B2/C1 course requirements.

Table 1. Learners' Achievements in B1+/B2 and B2/C1 courses (2018-2020)

Course	Certificate of Completion	Certificate of Attendance	Below criteria/Quit	Certificates
2018-2019	75% attendance; 60% task completion	50% attendance; 30% task completion		10.2.2019
B1+/B2 (26)	14 (53.84%)	1 (3.84%)	8+3q=11 (42.3%)	15/26
2019-2020				10.2.2020
B2+/C1 (20)	8 (40%)	3 (15%)	9 (45%)	11/20

Source: JA Project end-course reports (January 2019, January 2020), table prepared by the author

In addition, we may briefly refer to the qualitative part of B1+/B2 course evaluation, which assessed learners' likes, dislikes and suggestions for improvement. The collected results indicate learners' *high satisfaction* with different aspects of instruction: a) course material (content areas/topics/issues; interesting/informative videos; useful legal terms, grammar revision); b) course structure/organization and classroom management (integrated skills, multitasking, instructions, unobtrusive error correction; manageable assignments); c) learning atmosphere (relaxed, comfortable, supportive, motivating, involving, challenging, inspiring); d) teacher-student interactions (commitment, collaboration; supportive, flexible, professional attitude); d) student-student interactions (friendship, mutual respect, equality, exchange of knowledge/experiences/skills); e) feedback (useful, practical, accurate oral/written support); f) personal progress/learning/satisfaction (new knowledge, terminology, professional development/life skills; improved vocabulary/pronunciation, grammar, speaking/writing skills). The encountered *challenges* were largely

¹⁸ See professional networks and learning hubs: European Judicial Training Network (EJTN), E-Justice portal, etc. In 2021, three JA trainees (two B2+/C1 learners) won the first prize in the EJTN Themis *Access to Justice* Competition (16. Dec. 2021, Lisbon, Portugal). See: EJTN, 2022.

¹⁹ The presentation/discussion topics covered: Whistleblowing (US human rights expert/advocate); American court system (ELF, former court intern), and Police in the USA (ELF, ESP practitioner).

²⁰ The B1+/B2 and B2+/C1 course statistical data indicate that 10 learners reported having heavy workload; 2 learners were preparing their bar exam; 5 learners were on one-year maternity leave; 1 learner had a serious health condition; 4 learners who completed the first course but did not join the second course; 3 learners who quit the first course were referred to join a lower group.

related to the novelty of instructional approach, challenging syllabus and limited time frame, complexity of content areas and more time for in-depth coverage, need for learner training (active listening, turn-taking), busy professional/personal life, difficulty in keeping pace with course requirements and no time to regularly attend, revise and complete assignments. Learners' *suggestions* included: more focus on Serbian legal context, content-specific issues (legal institutes, procedures, competences); more videos, competitive and writing tasks; more learner activity/interaction; less homework; better handouts organization, sending material via email; better resources (whiteboard not flipchart, stable Internet access), etc. They were highly motivated to keep on learning in the next term (B1+/B2 Course Evaluation, Jan.2019).

2.3. Post-Implementation Stage

At the end of the first term, team members submitted class reports, reviewed course evaluation sheets, and embarked on preparing the syllabus/material for the next term. At the outset of the next term, the B1+/B2 teacher organized a learner group meeting to review the proposed syllabus/material contents and negotiate improvements. At the end of the first project year (Jan.2019), learners were awarded their completion/attendance certificates, and further arrangements were made for the second project year. At the outset of the second project year, the pre-course activities (NA, PT, OI) were repeated for newcomers. The B2+/C1 course teacher organized a learner group meeting to revise the proposed syllabus in line with learner needs. The implementation stage was a new opportunity to fine-tune the instructional design. At the end of the second project year (Jan.2020), learners received their completion/attendance certificates.

Finally, we may briefly refer to the statistical data from the two-year project period. *Table 2* demonstrate learners' achievements in all ELP/LE course with the JA project.

Table 2. Learners' Achievements in ELP/LE courses within the JA project (2018-2020)

Course	Certificate of Completion	Certificate of Attendance	Below criteria/Quit	Certificates	Total %
2018-2019	75% attendance; 60% task completion	50% attendance; 30% task completion		58	
A1+/A2-(26)	12 (46.15%)	9 (34.61%)	3+2q=5 (19.23%)	21/26	71.6%
A2+/B1-(29)	7 (24.15%)	15 (51.72%)	7 (24.13%)	22/29	
B1+/B2-(26)	14 (53.84%)	1 (3.84%)	8+3q=11 (42.3%)	15/26	
2019-2020				28	
A2/A2+-(18)	7 (38.88%)	6 (33.33%)	5 (27.7%)	13/18	50.9%
B1/B1+-(17)	4 (23.52%)	/	/	4/17	
B2+/C1-(20)	8 (40%)	3 (15%)	9 (45%)	11/20	

Source: JA Project end-course reports (January 2019, January 2020), table prepared by the author

Based on these final ELP/LE course results, we may notice that the initial applicants' interest exceeded the project proposal expectations, as learners rushed to take advantage of this unique learning opportunity, the first of that kind in this region. Notably, the total number of applicants (81) and accomplished course participants (58) was much higher in the first project year than in the second project year (55 applicants and 28 accomplished participants). The achievement averages (71,6% in the first project year and 50.9% in the second project year) show that the JA project was a highly meaningful form of ELP/LE learning for a majority of learners. The number of those who did not meet the set criteria or quit indicates the difficulties they had in keeping pace and handling their heavy professional workload, family life and ELP/LE training. The two-year period of intensive LE training may have exhausted the learners and caused burnout, which ultimately resulted in lower

interest, attendance, completion and final project results in the second project year. On the whole, all learners must be commended for their commitment, perseverance, resilience, achievements and best efforts to keep up with the demanding course requirements. For the B1+/B2 and B2/C1 teacher, the entire instructional design process and classroom practices were a highly challenging and labor-intensive but valuable and ultimately rewarding teaching/learning experience, which offered a chance to step out of the ELP/LE academic classroom and experience the real world of ELP/LE for specific professional purposes.

3. CONCLUDING REMARKS

Given the relevance of ELP/LE training for professional development purposes, the *JA Project: English for the Judiciary* (2017-2020) provided a unique opportunity to adult working professionals to attend ELP/LE courses specifically tailored for the judiciary. This paper has provided some insight into the major stages in the instructional design process and a glimpse into the theoretical-methodological framework and classroom practices in two LE courses (at B1+/B2 and B2+/C1), including course evaluation on observed benefits, challenges, and suggestions for improvement. In that context, we can draw some conclusions which may be valuable in designing prospective ELP/LE courses.

There is no doubt that the beneficiary's initiative, the project holder's assistance and the sponsor's decision to support this form of learning deserve the highest praise, particularly considering that it was the first-ever ELP/LE project in this region specifically tailored for the judiciary. Yet, one-time learning experience is hardly sufficient. The obvious relevance of ELP/LE courses was clearly illustrated by the fact that the core project team received a number of inquiries (from administrative court staff, practicing lawyers and administrative staff) about the likelihood of joining ELP/LE courses or having a course for their professional purposes. This express interest may be a signpost for relevant stakeholders (policy/decision makers, sponsors, institutions facilitating ESP training, professional associations wishing to provide such training for their members) to facilitate more authentic learning opportunities for adult working professionals.

In order to ensure effective instructional design and its proper implementation, the entire process has to be performed in line with the highest ESP professional standards. ELP/LE courses must be designed and taught by a team of experienced practitioners. In that context, the extensive pre-implementation stage is the fundamental, highly valuable and effective part of the instructional design; it ensures requisite teacher training and yields a general reference framework which may be used in creating new ESP courses. For all teachers, it was a challenging and labor intensive but professionally valuable and rewarding experience. While the first term syllabus was prepared jointly, this process was not repeated in subsequent terms. As teachers had to attend to their regular professional duties throughout the project period, their decisions and multitasking activities were driven by tight deadlines. The challenges, considerations and hurdles encountered in the implementation stage were largely resolved by teachers and students. Some dilemmas could be more efficiently addressed by the entire team, and a more constructive support of the host institution. Some technical, learning and classroom management issues may be resolved by investing into educational technology and digital infrastructure promoting learning in workplace contexts. In the author's opinion, the entire process should involve close collaboration of team members throughout the project period.

On the whole, the final JA project results can be said to have been quite satisfactory. The course evaluation results show that the learners who completed the two-year courses were highly content with their ELP/LE learning experience. While all JA project participants should be commended for exerting their best efforts, juggling their heavy professional workload, personal/family life and LE course requirements, only the most committed ones reached the finish line. In order to preclude learners' exhaustion and burnout, these circumstances should be taken into account when designing similar ESP/ELP course for adult working professionals. While the sponsors certainly had justified reasons for organizing such intensive training within the given time frame, it might be more practicable and effective if learners had at least a six-month break between two course cycles, which would give them a chance to reflect, regroup and restore their initial law-and-language learning enthusiasm.

These findings show that there is plenty of room for further improvements in all aspects of instruction in order to ensure proper learning environment, relevant resources, trained teaching staff and relevant approach to authentic learning in workplace contexts. Considering the huge interest of judicial professionals in law-and-language learning for real-life professional purposes, the author urges relevant stakeholders to support the development of similar ELP/LE courses for different target groups (lawyers, administration, police, etc). These courses should be organized on a regular or periodic basis, within a reasonable time frame, taking into account a number of internal and external factors in the busy professional and personal life of adult working professionals. It might also be a good idea to establish an ESP center which would provide specialized language services for work-related purposes in different ESP areas, train and employ ESP practitioners to provide courses tailored to the needs of a specific discourse community.

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