

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.

Submitted February 30th, 2023, accepted for publication March 31st, 2023

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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 “ $\alpha = 0,78$ ”.

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

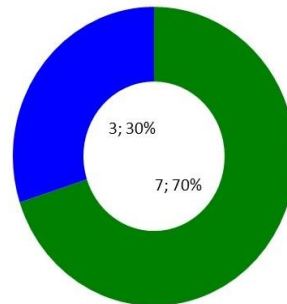
Questionnaire Cronbach Alpha

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.

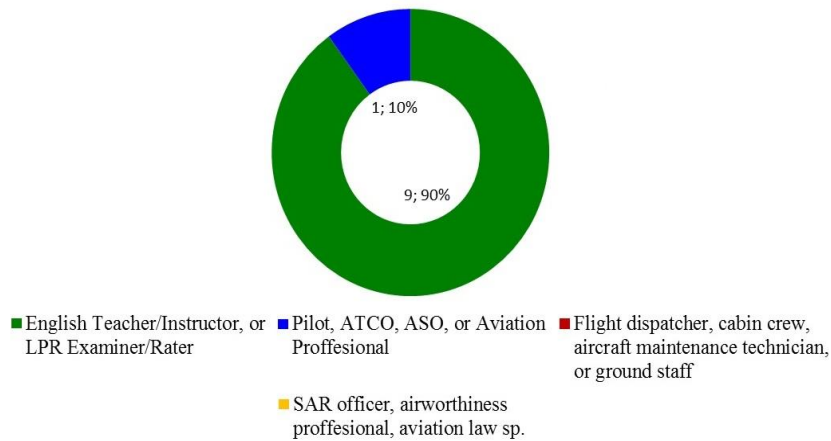
5.1. Question 1: What is your highest educational level?



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

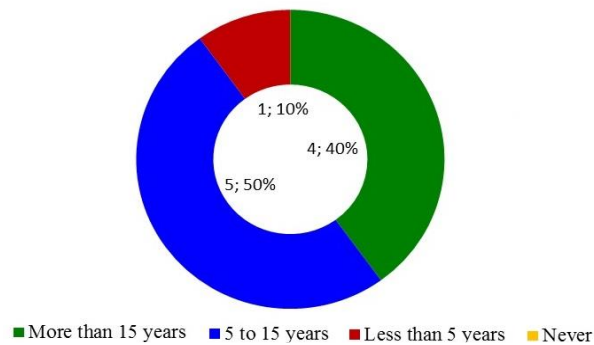
Capacitation beyond the bachelor's degree is something of particular concern, especially to get updated on the new trends in the teaching-learning process. Nevertheless, for someone who does not know much about aviation, pursuing studies in aviation areas could help to familiarize much more with the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

5.2. Question 2: What is your occupation?



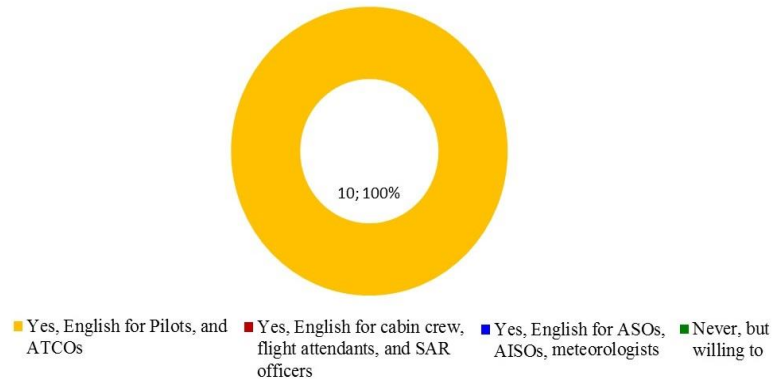
Most of those involved in teaching aviation English mentioned being teachers or educators, it means that they possess domain strategies for the teaching-learning process. Nevertheless, this task is not limited to educators, but other aviation professionals who have taken the initiative of teaching AE.

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



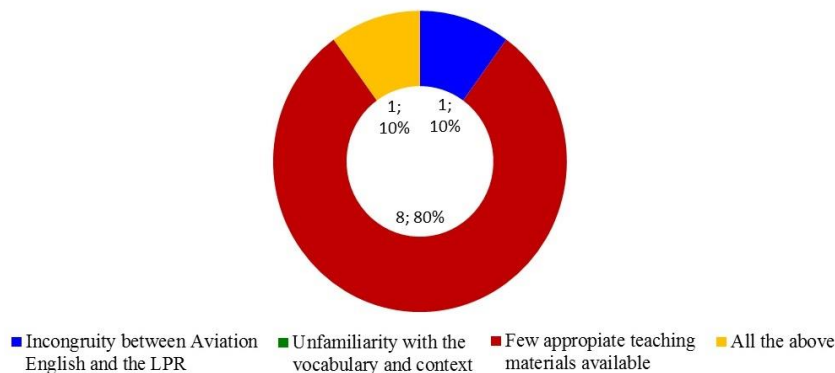
Experience in teaching helps getting mature in classroom activities, and is also a tool to learn and get familiar with what is less known, especially in aviation contexts. Working as an AE teacher can provide the educator inputs of the aviation-related field, to analyze what the learners need. At the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

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



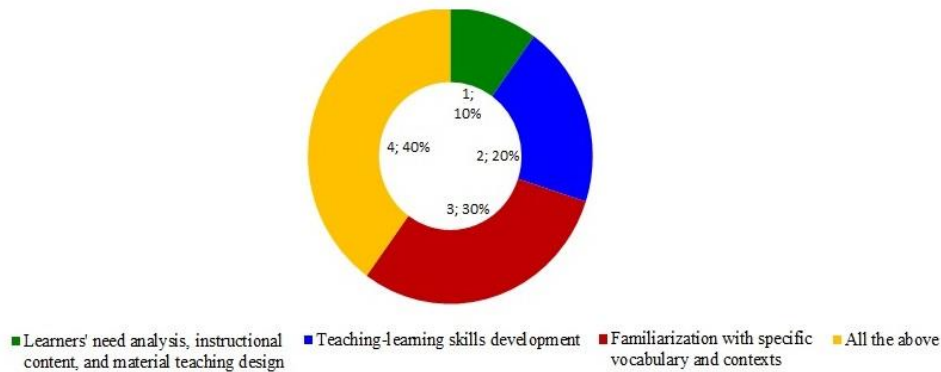
This was a multiple selection question in which all of the respondents choose the first choice. It demonstrates how popular English for air radiotelephony is; making this type of English the most customized in the teaching market, due to pilots, and ATCOs must meet the LPR test established by the ICAO. 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?



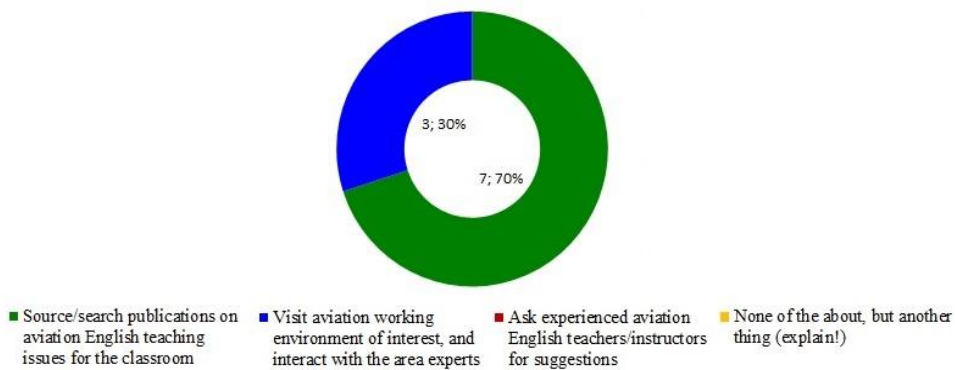
There are publishing houses that have published teaching materials of AE intended for pilots, that is why these books are much more common to find. It is curious, however, that instructors consider there are few of them. Even though there exist books of AE for pilots and cabin crew, instructors are not 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.

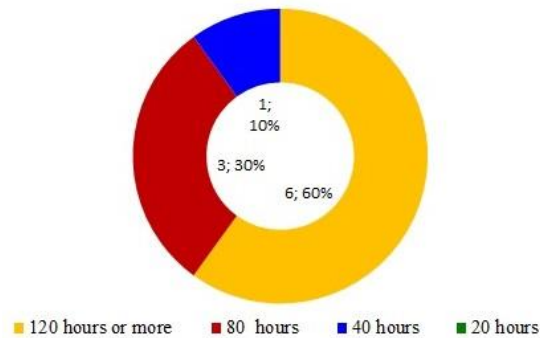
5.7. Question 14. What should an aviation English teacher/instructor do in order to get familiar with specific contexts?



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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