

Review research paper

## TEACHING EAP TO DIGITAL GENERATION LEARNERS: DEVELOPING A GENERATION-SPECIFIC TEACHING STRATEGY

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**Abstract.** *The article focuses on developing an English language teaching course for students of digital generation in non-linguistic specialties. To develop the course, a theoretical analysis of the scholarly literature on the digital generation student characteristics and their attitude to online and blended learning environments was conducted. In addition, the empirical data obtained through pre/post-tests and a survey of the students who enrolled in an English for Academic Purposes (EAP) course was analysed. The experimental groups were offered an EAP course specially designed for digital generation students and the control groups were offered a traditional EAP course. The pre-instructional questionnaire was developed to identify the behaviour of the digital generation students in the context of foreign language learning. The end-course survey was used to analyse whether the participants' perception of foreign language learning changed after completing the course. The pre-instructional and post-study language proficiency scores were compared across the experimental and control groups. The research findings indicated that the experimental groups showed a significant advantage over the control groups and expressed more positive attitudes to learning EAP. Practical implications suggest that tailoring foreign language teaching to the basic characteristics of digital generation learners can significantly improve its efficiency, resulting in a higher level of foreign language proficiency and leading to increased motivation to study a foreign language.*

**Key words:** *digital generation, non-linguistic specialties, EAP, online and blended learning*

### 1. INTRODUCTION

With the introduction of digital pedagogy into higher education settings, all the stakeholders, including instructors and course designers, have become concerned about how digital technologies may be used to enhance and innovate educational processes. COVID-19 pandemic has stressed “the importance of integrating technology into language teaching and learning” (Kohnke et al. 2021, 1). The successful development of online learning in higher education has created a shift in the way instructors and learners approach their tasks (Bassoppo-Moyo 2006). Online learning adopted in many universities has offered a variety of options for technology-enriched learning, making instructors better equipped with delivery

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methods, ranging from the online delivery method to the combination of both traditional and online formats. Moreover, the online teaching strategies appeared to be useful in the period of the COVID-19 pandemic.

However, their effectiveness is determined by several factors, one of which is appropriateness. This implies that online and blended learning delivery methods should be appropriate to contemporary realities and educational settings and the whole teaching strategy should be developed to the needs of learners who “have been growing up with the development of information technology” (Knežević 2017, 340). There is an increasing concern over finding an appropriate approach to teaching a foreign language to a new generation of university students.

It is well established from a variety of studies and teaching experience that foreign language teaching context is specific in some ways. Its most distinctive feature is that the instruction is competence-driven, focusing on developing learners’ language knowledge and speaking, reading, listening, and writing skills. In such a context, learners tend to heavily rely on their hands-on practice and demonstration of skills by the instructor, on the one hand, and their autonomy, on the other hand. Both researchers and practitioners in foreign language education settings acknowledge the importance of integrating online teaching methods into the learning environment for promoting successful language learning. Nevertheless, their focus seems to be largely on the development of one particular language competence, for example, vocabulary and grammar acquisition, or listening and speaking skills (Wang 2016, Nutta 2013, Abassy, Delvand and Heidar 2020, Akiyama 2019, Lim and Pyun 2019, Sumtsova 2015).

Another issue that arises from the foreign language teaching context is a wide variety of students’ behaviours in the language classroom, which can be attributed to foreign language learners’ characteristics, motivation and learning preferences. Investigation of these features is important for understanding how to accommodate teaching practices to different learner types to promote successful language learning. However, the challenge facing foreign language teachers is whether the instruction, which is based on individual differences approach and tailored to meet the preferences of particular students in the particular educational environment, may be replicated in another instructional context without much adaptation.

Yet, developing an effective teaching format that meets language learning objectives and satisfies target learners’ needs remains challenging. The necessity to examine learners’ unique characteristics, which differentiate them from the previous generation, is obvious. The importance of adopting a generational approach to teaching a foreign language to digital generation learners is justified for some reasons. First and foremost, digital generation learners comprise the highest percentage of the current population among higher educational institutions and urge universities to reconsider and re-engineer the educational environment and approaches (Graf 2005, Jaleniauskienė and Jucevičienė 2015). Hence, considering the characteristics of the digital generation, regarding their learning style, needs and preferences, may provide instructors with a valid basis for choosing the most appropriate teaching strategy. Second, exploring the student profile of a particular generation in the foreign language learning context can extend the literature on digital generation characteristics and language education. Moreover, the empirical investigation of the applicability of the generation-specific characteristics to developing a foreign language course may provide the strategies aimed at both effective language knowledge acquisition and the development of digital generation personalities. Furthermore, the comprehensive and multilevel methodological approach,

suggested in this study, may create a framework for developing teaching strategies based on digital generation learners' characteristics in foreign language teaching.

## 2. THEORETICAL FRAMEWORK

The concept of generation is chosen as a theoretical background to investigate whether characteristics of digital generation learners may influence the way they approach the task of learning a foreign language and whether the characteristics may be used to develop an effective English language teaching course. Within the framework of the Generational Theory developed by W. Strauss and N. Howe (1991) and their followers, generations are defined as different cohorts of people who are shaped during their formative years by their socio-economic and political environment, historical events, and related phenomena, which create a distinct gap between the generations (Parry and Urwin 2011, Scholz 2019, Shamis 2019). Researchers have approached the characteristics of the digital generation from different perspectives.

From the perspective of social sciences, a contrastive approach is considered to be the best when analyzing generations, when even minor changes may appear. When comparing and contrasting two digital generations in Europe, Generation Y (1980 to 1994) and Generation Z (born after 1995), the generational theory researchers pointed to information technology as the common driving force for these two generations (Scholz, 2019). Despite this, these digital generations differ a lot in terms of their beliefs and attitudes toward careers, politics, and education. What differentiates generation Y and generation Z is the structured system of education that the latter generation got used to and their expectations of this structure in everyday situations; their expectations of being taken care of and a feel-good environment at home, at school, at work (Scholz 2019, Jaleniauskiene and Juceviciene 2015).

From the pedagogical perspective, digital generation learners are placed under much scrutiny about their learning environment and performance. Born in the network society and engaged in technology-based socialization, they are characterized by multimedia literacy, Internet and social media addiction, distraction, different ways of reading and thinking, individualism, unwillingness to work in groups, overprotection, pragmatism, preferring intensive work, creativity, impatience (Jaleniauskiene and Juceviciene 2015, Cowan 2014, Nechaev and Durneva 2016, Sapa 2014).

E. Jaleniauskiene and P. Juceviciene (2015) identified characteristics of the latest generation of learners about the impact they may impose on their learning. Among their most common characteristics that have a positive impact on learning are greater technological advancement, reliance on a bigger number of constantly connected devices and possession of numerous sources of information, feeling comfortable in online communication and collaboration, worldliness, and strongly developed skills for navigating and creativity.

The most common characteristics that have a detrimental impact on learning are being susceptible to distractions, having strong multitasking skills, loss of face-to-face communication skills, loss of social skills, infantilism, individualism, a different method of reading, the feeling of being overprotected, preference for games instead of serious work, vulnerability when facing challenges and difficulties in real-world situations, impatience, and preference for speed instead of accuracy.

Undoubtedly, technology-dominated backgrounds, and different learning and social preferences of the latest digital generation learners intensively affect higher education (Buzzetto-Hollywood and Alade 2018). Being driven by the necessity to satisfy the digital generation learners' learning preferences and needs, educators may introduce strategies aimed at substituting social skills courses with information technology courses (Scholz 2019), which may deprive technology-driven learners of the social activity model of behaviour. Another challenge facing instructors and course designers is the necessity to identify what delivery mode is the most effective for teaching digital generation: traditional, online, or hybrid (blended) instructional format.

As far as online learning format is concerned, both researchers and practitioners have conducted much investigation about its efficiency in terms of students' overall performance and their attitudes and perceptions towards learning. Some research findings showed mixed student feelings about online learning. Some students reported their positive perceptions of online courses that required much learner autonomy (Huang 2002). Several studies found no significant difference between the online and traditional learning formats regarding student satisfaction and student learning (Shelley et al. 2007).

Even though there proved to be no distinctive student performances in online classes compared to traditional classes, attitudinal measures revealed students' more positive reactions to their web-based instructional experiences. (Newlin et al. 2005). During the COVID-19 pandemic, many students liked online learning for such reasons as "safety, comfort, economic reasons, and having more time in general" (Sevy-Biloon 2021, 15).

Nevertheless, the disadvantages of online instruction are manifold and cause considerable concerns among both learners and instructors. One of the major concerns is the lack of social interaction in online courses which negatively affects their learning outcomes and their motivation. This became obvious during the pandemic of COVID-19 when "little interaction between classmates and teachers" was the most common reason for student dissatisfaction and lower learning outcomes (Sevy-Biloon 2021, 15). The researchers agreed on the necessity for the course designers to focus their attention on those elements that could support the unique experiences of students exposed to the online delivery mode and yield positive student attitudes, and on the necessity for the academic institutions to create effective online learning environments (Reisetter et al. 2007, Papastreghiou 2006). For example, encouraging instructor support and student-to-student interactions through group work might enhance online learning (Biggs et al. 2006, Hiltz et al. 2000). Another concern is changing the expectations of students. For example, students expect instructor responses to email and discussion boards to occur shortly after the students post their queries (Fox 2007).

Due to the obvious negative sides of online instruction, the hybrid or blended instructional format is gaining momentum. Not surprisingly, higher satisfaction was expressed by students enrolled on a hybrid course format that incorporated online activities with traditional, face-to-face delivery (Marcketti and Yurchisin 2005). This hybrid delivery method, also known as blended, online learning helps to overcome the disadvantages of a completely online environment and ensures the benefits of personal interaction with the convenience and flexibility of online assignments and discussions (Lampert and Hill 2012).

Currently, although there are different views on accommodating generation-specific characteristics to learning practices, most researchers and practitioners tend to agree that the university environment should be created based on the generation profile. Despite their obvious preferences for a technology-driven educational environment, the digital generation learners should be offered a learning environment which encompasses classroom, informal

and virtual environments as a single, integrated environment (Jaleniauskienė and Jucevičienė 2015).

Within the context of foreign language teaching, innovative digital educational technologies have been widely used in the EFL settings (Wang 2016, Nutta 2013, Abassy, Delvand and Heidar 2020, Akiyama 2019, Lim and Pyun 2019, Yen et al. 2015, Sumtsova 2015). Computer-based and web-based instruction has been acknowledged as efficient technologies in the language classroom, which can promote both language skills, such as vocabulary learning (Wang 2016), grammar learning (Nutta 2013), listening skills (Delvand and Heidar 2020), and more effective learning environment (Alodail 2014, Lau et al. 2014, Nutta 2013). An increasingly effective instructional medium for developing communicative language competences is videoconferencing, which contributes to effective learners' vocabulary acquisition (Akiyama 2019), and considerable progress in listening and speaking skills (Lim and Pyun 2019), writing and speaking skills (Yen et al. 2015).

### **2.1. Statement of the problem**

In the aforementioned studies, the relationship between digital generation learners' characteristics and their performance and perceptions of the learning environment has been a subject of extensive research, although it has not been developed much in foreign language teaching studies. Little attention has been paid to investigating what teaching strategies can be implicated to enhance motivation, develop positive attitudes, and ensure the high performance of digital generation learners when developing their foreign language competence.

The considerations mentioned in the theoretical framework section would lead to the following implications for foreign language teaching: 1) the time borders between the generations are not sharp ones, which implies that the differences between two digital generations (generation Y and generation Z) are not as relevant as the differences between generation X and both digital generations Y and Z; 2) situational factors during youth may lead to different variations of one generation in different areas of a country; 3) the instructional approach to digital generation learners should be based on the comprehensive analysis of their needs, preferences and expectations of the learning environment; 4) teaching strategies should be aimed at comprehensive and consistent development of foreign language competence. Within this investigation, we do not intend to analyse the factors that affect the characteristics of the cohort of technology-driven learners. Rather, their generational characteristics are important as the learning inputs. Furthermore, the current research adopted an umbrella term of the digital generation and approached the task by combining the characteristics as the literature on both the first and second digital generation suggests. This generalization may seem to lead to some confusion, on the one hand; on the other hand, this approach may prevent us from overlooking some intrinsic features of EFL learners in the higher education environment.

This study aims at identifying characteristics of digital generation learners from the foreign language teaching perspective and at developing a foreign language teaching strategy based on this learner profile to promote their effective learning. We assume that in learning a foreign language, digital generation learners demonstrate better educational outcomes and express more positive attitudes to their learning process when they have a web-based student-centred rather than traditional teacher-centred instructional format.

### 3. METHODS

The study was conducted with 62 students of Economics at Perm State University in Russia, taking an English for Academic Purposes (EAP) course. Thirty-five (56%) were males and twenty-seven (44%) were females. Thirty-two participants (17 males, 15 females) were members of three experimental groups and thirty participants (18 males, 12 females) were in three control groups. The participants' ages ranged from 18 to 20, with a median of 19 years ( $SD = 0.7$ ). They were supposed to belong to the same generation. Age and gender were kept as fixed variables. The same instructor was responsible for all the classes.

The empirical base of the study was meant to be the results of the entrance and final tests identifying students' level of English language competence, the students' responses to a survey that was developed to identify the behaviour of the digital generation young people in situations related to learning a foreign language and the students' responses to a questionnaire about their attitude to the language learning process in the course.

The tests to assess students' proficiency in English were done in the DIALANG diagnostic system available at [www.dialangweb.lancaster.ac.uk](http://www.dialangweb.lancaster.ac.uk). They were conducted at the beginning and the end of the course. The competences assessed were reading, writing, listening, grammar and vocabulary. Students used the system from its website free of charge.

The survey on the behaviour of the digital generation learning English was given to students before the beginning of the course. It included a series of questions adapted from the previous studies: 1) the questionnaire by Hans Jürgen Eysenck which was designed to measure two major dimensions of personality, namely extroversion and neuroticism, and to identify behavioural characteristics whose significance depends on their relation to a sufficiently wide range of life situations (Eysenck 1958); 2) the questionnaire developed by Kenney which can be used to identify the main traits of digital generation respondents (Kenney 2015); 3) the questionnaire aimed at disclosing digital students' attitude to digital technology (Seemiller and Grace 2016). The survey was created with the help of Simpoll (<https://simpoll.ru>), which is an online platform for developing surveys. Each student received a link for the survey and was able to answer the questions at a convenient time and pace.

The questionnaire contained the following set of 20 questions:

- 1) Do you like tasks that require to be focused on minute details?
- 2) Is it difficult for you to feel at ease in a large group of people?
- 3) Do you like to be a leader in a group activity?
- 4) Do you get upset easily?
- 5) Do you often argue about things you are quite ignorant about?
- 6) Do you feel unhappy when you can't communicate with many people?
- 7) Do you often want to be alone?
- 8) Do you often find it difficult to concentrate?
- 9) Are you a sensitive person?
- 10) Do you often act quickly and confidently?
- 11) Do you work well on a team?
- 12) Do you prefer to work on a project alone or with 1 or 2 of your friends?
- 13) Do you prefer to work on a project alone or with a large group of people?
- 14) What are your main sources of information?
- 15) What technology do you use?

- 16) Can you concentrate on a long text for a long time?
- 17) Do you think pictures, graphs, tables, and other visuals make information more understandable?
- 18) Do you want to get constant feedback about your performance?
- 19) Do you appreciate your teacher's support in your study?
- 20) Do you feel upset if your teacher ignores you?

At the end of the course, all the participants of the study were asked to answer a questionnaire about their attitude to the language learning process. The respondents were asked three questions:

- 1) Can you measure your English classes in the past three months on a scale from 1 to 5, where 1 is 'I liked my classes very much' and 5 – 'I disliked my classes'?
- 2) Are you going to study English in the future?
- 3) What are the main reasons for your interest in learning English?

The EAP course was the offline course that formed the context for this study in all student groups. During the course, students of experimental and control groups were introduced to broad academic skills. They learnt to acquire the knowledge and use the skills that they can implement during their academic course and in specific academic situations in the future. Students acquired academic writing skills, which were essential for doing academic writing tasks. These tasks varied from writing graphs and bar chart descriptions to academic essays. Accurate grammar, punctuation, and language use were important components of the EAP course writing classes, along with specific teaching of the formal language. In addition, students were introduced to various text types, linking words and signposting expressions. Academic listening involved listening to lectures or discussions in English and writing adequate notes on them. To improve their academic speaking skills, young people were given practice in making presentations, taking part in discussions on academic topics and other activities. Likewise, they studied reading strategies such as skimming to understand the gist and scanning to find specific information and analysed how texts can be structured. The course textbook was IELTS Masterclass by Simon Haines and Peter May.

As mentioned above, the course content within all student groups was the same as well as the course textbook, but under the experiment, students were randomly assigned to two instructional formats presenting the course materials: a web-based student-centred instructional format (experimental) and a traditional teacher-centred instructional format (control).

The web-based student-centred instructional format meant using a special digital generation-specific teaching strategy developed based on the students' responses to the questionnaire given at the beginning of the study, whereas the traditional teacher-centred instructional format did not take into consideration the digital learners' profile.

In the experimental groups, students were placed at the centre of the learning process. Within the framework of a student-centred approach, the instructor used such teaching methods as active learning, flipped classroom and problem-based learning. Very often students were given the topic before their classes through well-structured online audiovisual materials: short texts, videos, films, presentations, and mind maps. Then in class, they discussed its key aspects presenting their interpretation of an issue in small groups of four to six students.

The topics were taken from the course textbook, but students were allowed to refer to other sources of information at their discretion. During the course information was presented in a multimodal format. Apart from doing tasks from the course textbook, the instructor in the groups created presentations and graphic images which incorporated

web-based information in the interactive format. Stepik online platform (<https://stepik.org>) was chosen to be the software environment for the course. Some texts, listening tasks and discussion questions from the course textbook were given to students on the platform. Along with Stepik, a VK group (<https://vk.com>) was created. The main aim of the group was to provide constant access to all necessary materials and to allow the students to be in touch with their teacher at any time. Once a week students were offered face-to-face meetings with their teacher so that they could receive instructional support in dealing with any problems that they experienced.

In the control groups, a teacher-centred examination-driven traditional instructional approach was used. The teacher took the most active, leading role using preferably the PPP (Presentation, Practice and Production) teaching method. The usage of a concept or an item was demonstrated by the teacher. Then students had a teacher-assisted practice: they asked for help if there were any difficulties during the completion of a task. In the last stage, production, learners worked with minimal help, but the instructor was always ready for assistance. All the tasks were taken from the course textbook.

#### 4. RESULTS AND DISCUSSION

The research explored the characteristics of digital generation students from the foreign language teaching perspective and students' performance and perceptions of EAP learning in a web-based student-centred instructional format and a traditional teacher-centred instructional format.

The survey conducted at the beginning of the study uncovered that digital generation learners preferred the flexibility of a web-based format of information delivery. The habitual way of obtaining information for them was from the screen of their digital devices in the form of fragmented well-structured short texts. This concurs well with preceding findings in the literature. Gibson (2016) emphasizes that learners who belong to the digital generation have "shorter attention spans" and "their ability to multitask is developed by constant screen exposure". Some scholars believe that this generation of young people has preferences for simplification and prefers small pieces of online information with pictures (Gibson 2016, Lenhart 2015, Töröcsik et al. 2014).

In addition, students reported that although they did not tend to work in large groups being very individualistic, they often appreciated cooperative learning and liked working in small groups. Their responses are consistent with the findings of the research conducted by Teh Ya Yee and Moy Tow Yoon (2019), who reported on the positive learning experiences of cooperative learning from both the group and individual perspectives, and by Seemiller and Grace (2017), who found that digital generation students prefer both independent learning and working in small groups (Seemiller and Grace 2017).

Furthermore, the survey showed that representatives of the digital generation expect to be given constant support from their teachers and if they are not, digital students feel upset. This is confirmed by the findings of Cowan's study (2014). He assumes that support is vital for the digital generation of young people, and their teacher should "scaffold their activities through feedback" (Cowan 2014).

The characteristics of digital generation students identified after the analysis of the questionnaire responses were taken as a basis for a digital generation-specific teaching strategy of the web-based student-centred instructional format of the course. The format



was introduced in experimental groups. Special attention was paid to two basic concepts, teacher confirmation and informatization, which were assumed to be of vital importance for foreign language teaching for students of the digital generation. These concepts are related to the basic characteristics of digital students, which were revealed. By the term 'informatization' we mean the integrated use of information technologies which can help to create a comfortable atmosphere for the digital generation students' learning. Teacher confirmation is defined as the interaction between students and educators in which teachers make students feel they are valuable individuals (Shen and Croucher 2018). The highest level of teacher confirmation appears to be significant for designing the generation-specific teaching strategy because the high level of teacher confirmation is in strict compliance with the students' constant need for their teacher's support, which was demonstrated in their responses.

As the main purpose of the study was to evaluate a traditional teacher-centred instructional format and a web-based student-centred instructional format in terms of their efficiency for digital generation learners, we compared the results of the students' entrance and final tests identifying their level of English language competence done before the beginning of the course and at the end of the course. Table 1 presents the percentages of students who received A2, B1 and B2 grades in experimental and control groups across the two-time points.

Table 1 Percentages of students with grades A2, B1 and B2 grades.

| Grade | Entrance test          |                | Final test             |                |
|-------|------------------------|----------------|------------------------|----------------|
|       | Percentage of students |                | Percentage of students |                |
|       | Experimental groups    | Control groups | Experimental groups    | Control groups |
| A2    | 40                     | 43             | 20                     | 37             |
| B1    | 51                     | 50             | 65                     | 54             |
| B2    | 9                      | 7              | 15                     | 9              |

Students in the experimental groups demonstrated better educational outcomes in their final test in comparison with the control groups' students. Taking into consideration the fact that the initial grades of students were practically equal, it can be claimed that using a web-based student-centred instructional format in groups of digital generation learners is worthwhile as it increases their language proficiency. We assume that the chosen web-based student-centred instructional format contributed to the progress identified in the experimental groups for several reasons.

Firstly, course materials presented in a compressed, well-structured visual mode in the forms of presentation, mini texts and videos given online helped the students to keep their concentration for a long time because students of the digital generation better memorize information introduced in such a way. Secondly, face-to-face meetings with their teacher were effective because digital generation learners consider personal contact to be an integral part of their teacher's performance and enjoy the learning environment when their activities are scaffolded through their teacher's feedback. Thirdly, being individualistic, digital generation students like individual learning. This preference for much autonomy was considered, and the students of the experimental groups had a chance to think over the material on their own before they took part in discussions. Following this characteristic, we introduced the flipped

classroom method. However, we considered the fact that their complete independence may have made them “less confident as long as challenges and difficulties emerge” (Cowan 2014) and organized discussions in small groups, which was useful for students as they acquired new learning methods by observing how their peers studied.

Along with the changes in educational outcomes, we examined the changes in the students’ attitude to the language learning process in general at the end of the course. The responses given by the students showed that the young people in the experimental groups were more likely to continue learning English in the future (95%). They mentioned that the atmosphere in which they studied was pleasant and engaging. The majority of the students in the experimental groups liked their English classes very much (90%). Furthermore, the majority of respondents in the experimental groups (91%) noted an increase in their motivation to study. The survey demonstrated their positive reaction to the introduction of the web-based student-centred instructional format of the course. In contrast to the experimental groups, most respondents in the control groups did not show an intention to continue learning English (78%) and they described their English classes as useful but a bit boring and monotonous and said that they had quite a neutral attitude to them (85%). The motivation increase was mentioned by about 5% of students in the control groups.

## 5. CONCLUSION

The study explored the characteristics of digital generation learners from the foreign language teaching perspective and examined the efficiency of a web-based student-centred instructional format based on these characteristics in comparison with a traditional teacher-centred instructional format. It was found that generational characteristics are important as learning inputs when approaching the task of developing a foreign language teaching course for digital generation students. The research findings are universally applicable and can serve as a basis for organising English for Academic Purposes courses in institutions of higher education presenting a practical framework for developing an effective educational environment for digital generation learners.

Nevertheless, a number of limitations have to be acknowledged and further research would be essential. In particular, a larger sample of students from several universities in various geographical areas can be analysed. Additional work needs to be done to examine learners' perception of their teacher's communication behaviours, which can influence the educational outcomes and students’ attitudes to the learning process. Furthermore, it is recommended to broaden the scope of study to multi-level cultural contexts.

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