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## Abstract

The current study intended to analyse the perception of foreign language higher education instructors and higher education students in Romania regarding the increase of their digital skills and the use of digital tools in the COVID-19 pandemic. Online instruction provided a multitude of challenges and opportunities for designing instructional content. Our respondents concluded that language learning games and gamified instruction represent valuable tools in reconfiguring the scenario within language classes. By exploring these opportunities that increase students' participation, interactivity and accessibility, the teaching and learning experience can be improved and adapted to more complex and ever-changing technological advances.

### Keywords:

digital tools; gamification; emergency remote teaching; foreign language teaching; engagement; participation; interactivity.

## Zusammenfassung

Die aktuelle Studie sollte die Wahrnehmung von fremdsprachigen Hochschullehrende und Studierende in Rumänien hinsichtlich der Steigerung ihrer digitalen Kompetenzen und der Nutzung digitaler Tools in der COVID-19-Pandemie analysieren. Der Online-Unterricht bot eine Vielzahl von Herausforderungen und Möglichkeiten für die Gestaltung von Unterrichtsinhalten. Die Befragten kamen zu dem Schluss, dass Sprachlernspiele und spielerischer Unterricht wertvolle Werkzeuge darstellen, um das Szenario innerhalb des Sprachunterrichts neu zu konfigurieren. Durch die Erforschung dieser Möglichkeiten, die die Beteiligung, Interaktivität und Zugänglichkeit der Lernende erhöhen, kann die Lehr- und Lernerfahrung verbessert und an komplexere und sich ständig ändernde technologische Fortschritte angepasst werden.

### Schlüsselworte:

digitale Tools; Gamification; Notfall-Fernunterricht; Fremdsprachenunterricht; Engagement; Partizipation; Interaktivität.

## 1. Introduction

In the digitised post-pandemic Higher education environment, an intricate nexus has been built between the use of digital tools and apps and foreign language instructions. The multitude of challenges and opportunities generated by online instruction resulted in hands-on experience to be further adopted and (re)adapted to hybrid and/or face-to-face instruction. More than exploring the affordances of digital tools and apps and customising them for language teaching, instructors engaged in a process of recycling and designing sustainable language resources. An increased awareness in terms of digital skills, digital pedagogical competence and methodological approaches was experienced by both teachers and students, which can be a prerequisite for building more flexible learning paths, a collage of formal and informal elements and better collaboration among instructors and learners.

The current paper dwells on results drawn from two questionnaires conducted within the DIAL4u (*Digital pedagogy to develop Autonomy, mediate and certify Lifewide and Lifelong Language Learning for (European) Universities*) Erasmus+ project, in which the eight partner universities design and test scenarios for online foreign language instruction. Specific aspects of the project relate to the development of language instructors' digital skills and pedagogy, the use of digital tools in language mediation, blending formal and non-formal learning environments in the recognition and validation of 21st century skills, as well as motivating learners to engage in autonomous lifewide learning. The questionnaires serving as basis for the analysis conducted in the current paper are part of the digital outputs designed and coordinated by the Babeş-Bolyai University team (in co-leadership with the Mikolo Romeris University in Lithuania). These questionnaires, addressing language instructors on the

one hand and undergraduate and graduate students on the other hand, were meant to provide a mirroring of respondents' perceptions of their digital skills and customisation of activities and resources using digital tools in relation to the foreign language instruction scenario throughout a critical timeline.

The aims of the current paper are manifold, stemming from instructors' and students' perception of how the development of digital skills was influenced by the abrupt transition from face-to-face language instruction to online teaching and learning. Perceptions of the use of gamified language activities in both teaching and learning are discussed in relation to various types of didactic activities facilitated by the use of digital tools. Another dimension to be covered in the study refers to analysing the extent to which the digital framework enhances engagement, participation, interactivity and collaboration. It further illustrates language instructors' choice regarding the use of digital resources extended from class activities to assessment (peer-assessment and gamified assessment).

The theoretical backbone covers aspects encompassing gamification and gamified assessment, student motivation, engagement and interactivity, building of transversal skills and the potential of digital framework to support recycling and sustainability of language tasks to be used in hybrid or face-to-face instruction, but also awareness of limitations and affordances/ transposition. The Methodology section covers the purpose of the study, participants and procedure, research instruments and hypotheses and is followed by the analysis and discussion of the results obtained in the two questionnaires. Preliminary conclusions and further directions of research are also explored in view of improving the language mediation process and teaching and learning experience towards a more digital native student-centred approach.

## 2. Theoretical framework

The major outcome of online instruction, supported by the trend to integrate and rely on new technologies in both professional and personal life, is the reconfiguration of Pedagogical Digital Competence (PDC) in the Romanian higher education context referring to language mediation. Embedding the expanded meanings of the key terms, competence, *digital* and *pedagogical*, this framework for teaching can be defined “as a new dimension in teachers' pedagogical skills and competences” (From, 2017, p.

43) and it emphasises the need for digital skills to become the backbone of foreign language instruction, practice and learning. In this line of thought, “PDC should be thus a prerequisite for hybrid and face-to-face teaching in language instruction [...] and an integrated skill that must not be limited to the teaching framework generated by the COVID-19 crisis situation” (Mudure-Iacob et al., 2022, p. 129).

With digital skills in the foreground, language mediation accounts for an integrative approach in which learners' up-to-date and continuously changing transferable skills enhance a more interactive, collaborative and creative practice of acquiring and improving macro- and micro- language skills. Laurillard (2008) refers to digital technologies' recurrent use of improving educational methods and signals the potential to contribute to a rethinking of educational models. If on behalf of language instructors, the use of digital skills can be a game-changer in terms of introducing and practising content and language skills, “students who master digital literacy are not just more prepared for online learning, coping better with the pandemic, or being more employable, but they also develop a consistent advantage by becoming lifelong learners and participative citizens.” (Vodă et al. 2022, p. 25) In this scenario defined by the insertion of rapid technological advance in daily life (Artificial Intelligence, Online Social Network sites, (Live) Streaming platforms), the expansion of learning from on-site to online and diverse learning communities, putting digital skills to use in the language class (be it on-site, hybrid or online) becomes a crucial step in shaping the new identity and roles of instructors and students.

One valuable assignment triggered by the emergency remote teaching (ERT) generated by the COVID-19 pandemic refers to it being a catalyst for many language instructors in the sense that they could seize the opportunity to evaluate their proper implementation of ERT. More than just reflecting on the success of such an endeavour, as suggested by Hodges et al. (2020), our contention is that language instructors are required in fact to ensure qualitative and continuous instruction centred on building digital skills along the process, not only throughout the ERT timeline, but even more so in the post-pandemic context.

“With brains wired for games, the expectations and needs that [...] learners have can be answered in

the manner of designing compatible learning outcomes, namely, using language as a communication tool for networking and for mimicking real-life and workplace contexts". (Mudure-Iacob, 2021, p. 77). In response to these tailored needs analysis to cater to the learning requirements that *digital natives* have (Prensky 2001), two dimensions need to be taken into consideration, namely *gamification* and *game-based learning* as facilitating elements in the process of introducing and practising language content in the framework of PDC. Both of these dimensions entail the pedagogical and creative use of digital skills in selecting, customising, recycling or designing OERs provided by learning apps and tools.

Werbach and Hunter (2012) conceptualise *gamification* starting from the idea that its main principles originate in implementing game design techniques in non-game contexts, thus inserting game elements in educational scenarios and "enhancing services with (motivational) affordances in order to invoke gameful experiences and further behavioral outcomes" (Koivisto et al., 2014, p. 3027). Gamification in language learning involves primarily using the target language while performing activities and tasks as a second aim and focuses on creating a complex learning environment to support students in their educational path. Figueroa (2015) links gamification to educational objectives and the subsequent stages of learning that students need to complete. "These educational objectives will be seen by the learner as challenges to be accomplished in order to move from one stage to the other. At the end the challenge and moving from one stage to the other becomes part of the learning outcome" (Figueroa, 2015, p. 43). *Digital Escape Rooms* (which can be designed using platforms and tools such as OneNote, Google forms, Genial.ly, Minecraft) can be one example of how gamification can be embedded in language instruction sequences, with the added-value of introducing content, topic-based narratives along different tasks that require the use of integrated micro- and macro-skills.

Caponeto, Earp and Ott (2014) refer to *Game Based Learning (GBL)* as the use of games for instructional goals and many researchers emphasise the game elements in GBL together with their implicit benefits for the students. Among these game elements, Vandercruyse, Vandewaetere, Clarebout (2012), compile the following game items: fun and

enjoyability, rules, goals and objectives, interactive/interaction, outcomes and feedback, problem solving/ competition/challenge, representation/ story/ fantasy/context. These elements trigger various benefits for the learners, stemming from classroom-related dimensions (motivation, interactivity) to game-mirroring dimensions (creativity, entertainment, and enthusiasm). Other specific characteristics of GBL include badges, immediate feedback and the display of students' performance on a leaderboard, which can be motivational incentives for players on the one hand, and, resourceful indicators of students' progress for language instructors, on the other hand, ensuring formative assessment. *Kahoot!*, *Quizizz* and *Padlet* are examples of game-based learning platforms and apps, with the potential of enhancing class participation and engagement, interactivity, and facilitating content understanding in the language classroom.

The affordances generated by the integration of gamification and game-based learning in the language classroom and the inherent stimulation to put to use digital skills in language mediation allow for an expansion beyond the online instruction scenario to encompass also the sustainability of tasks and activities in on-site and hybrid instruction. An analysis of how such dimensions affect and influence language instruction would confirm the stringent need to bring digital skills into a more dynamic, occasionally gamification-infused and PDC-focussed language mediation framework in order to align the language classroom to the current skills required both by the academic environment and the workplace.

### 3. Methodology

#### 3.1 Purpose of the study

The aim of the current study is to explore and compare the attitudes of Romanian Higher Education foreign language instructors and language learners towards the manner in which the perceived increase of digital skills influenced their design of instructional language content and interactional pattern by using language learning tools and apps. Another focus is on observing and analysing the integration of gamification and game-based learning in language mediation, as well the inherent impact and benefits upon participation, engagement and interactivity.

### 3.2. Participants and Procedure

A total of 104 teachers and 150 students were involved in the study.

38.5% of the teachers were 41–50 years old, 33.7% were 31–40, 19.2% were 20–30, 7.7% were 51–60, and 1% were beyond 60. Regarding their teaching experience, 22.1% of them had 21–25 years, 17.3% had 16–20, 17.3% had 11–15 years, 15.4% had 6–10 years, 19.2% had 26–30 years, 2.9% had 26–30 years, 3.8% had 31–35 years, and 1.9% had more than 35 years. 12.5% of the teachers were pursuing their PhDs, 27.9% had master's degrees, and 9.6% had bachelor's degrees. 50% of the teachers held PhDs. Digital literacy was rated as advanced by 61.5%, intermediate by 31.7%, and expert by 6.7%.

96.7 percent of the students were pursuing bachelor's degrees, 2% were pursuing master's degrees, and 1.3% were pursuing doctoral degrees. While 5.3% studied French, 2.7% studied German, 3.4% studied Hungarian, 1.3% studied Italian, 1.3% studied Spanish, 5.3% studied Romanian, and 2.7% studied other languages, 78% studied English as their primary foreign language. Language proficiency was rated as advanced by 38% of respondents, upper-intermediate by 24.7%, intermediate by 18%, proficient by 12%, elementary by 4.7%, and beginning by 2.7%. Digital skill levels were rated as advanced by 60% of respondents, intermediate by 28%, expert by 9.3%, elementary by 2%, and beginner by 0.7%.

Regarding the research procedure, the study used two questionnaires (one for teachers and one for students) to collect both quantitative and qualitative data using Google forms and targeted the timeframe spring 2020- autumn 2021. The year 2020 constituted the moment of rapid transition to exclusively online teaching due to the lockdown and the teaching format was maintained, depending on educational institution for the entire spring semester, in particular cases, continuing a hybrid pattern until the spring semester 2022. By 2021 teachers had acquired a certain degree of experience in online instruction, having explored various digital tools and platforms in the language mediation process. Participation was voluntary, personal data was kept confidential and the participants granted their informed consent.

### 3.3. Research Instruments

The teacher survey had 56 questions in total, whereas the student questionnaire consisted of 48 items, but the current study included a set of questions

from two sections in the questionnaire, namely Digital platforms/apps and Digital Pedagogy. We determined that Cronbach's Alpha =.85, which indicates that the survey has an internal consistency of 0.85. As a result, while considering the value of Cronbach's Alpha, our study instrument is pertinent and reliable.

The quantitative data obtained were statistically analysed using Jamovi® software, version 2.3.21, and since the research instrument that we used is not standardised, we used a cut-off point of -1/+1 mean standard deviation for setting the cut-off points. The qualitative data were processed using content analysis.

### 3.4. Research hypotheses

Our research examined the following hypotheses:

1. There is a significant increase in and a strong influence between the development of HE instructors and students' digital skills along the online teaching framework and, as a result, a growing interest in instructors' and students' willingness to use the interactive features of apps and tools in the instructional process.

2. Gamification of language activities is perceived to have a positive influence on class engagement, participation, and interactivity.

## 4. Results and Discussion of Results

The analysis covers different sections of the questionnaire, aligning findings with the research hypotheses, and tries to demonstrate the connection between the development of digital skills for HE language instructors and students alike, as well the outcome of this nexus. A distinct dimension to be discussed is the process of making language classes more interactive, engaging, and participative by means of gamification, at the same time highlighting the limited use of gamification as a framework for particular activities, including assessment.

Related to the respondents' perception of their development of digital skills in the particular timeframe, the aim was to observe the manner in which a potential increase in instructors' digital skills could influence students' acquisition of digital skills and the willingness of both categories to integrate apps and tools in the teaching and learning scenarios. Considering the significant difference in the level of digital skills at the beginning of the pandemic and the questionnaire completion timestamp as seen from the instructors' answers to questions Q9. *How do you assess your digital skills at the beginning of the*

pandemic; Q10. How do you assess your digital skills now? (see Mudure-Iacob, Cotoc, Hopârtean, Micle, Andronache, 2022) one preliminary observation is that “the pandemic positively influenced the development of language instructors’ digital skills, due to the fact that they had to use digital platforms and apps” (Idem, p. 134).

By relating the answers obtained with students’ responses to the same set of questions, in both cases of responding samples we noticed that the respondents perceived an increase in their digital skills. However, despite the perceived increase in digital skills for both instructors and students, no statistical relationship was

established between the two categories, indicating that the two samples did not influence each other (See Table 1 below). Moreover, a significant difference was perceived between the level of digital skills at the beginning of the pandemic and the questionnaire completion timestamp for both instructors and students, especially for those who already had a certain level of digital skills. Consequently, the higher the level of perceived digital skills before the pandemic, the higher the level of perceived digital skills as indicated upon completion ( $r = 0.65, p < 0.05$ , for students, and respectively  $r = 0.42, p < 0.05$  for instructors).

Table 1. Digital skills correlation matrix

Correlation Matrix		Digital Skills Beginning Pandemic (Students)	Digital Skills After Pandemic (Students)	Digital Skills Beginning Pandemic (Teachers)	Digital Skills After Pandemic (Teachers)
Digital Skills Beginning Pandemic (Students)	Pearson's r	—			
	p-value	—			
Digital Skills After Pandemic (Students)	Pearson's r	0.653 ***	—		
	p-value	< .001	—		
Digital Skills Beginning Pandemic (Teachers)	Pearson's r	0.015	-0.025	—	
	p-value	0.861	0.769	—	
Digital Skills After Pandemic (Teachers)	Pearson's r	0.009	-0.030	0.428 ***	—
	p-value	0.918	0.722	< .001	—

Note. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Another noteworthy observation in this respect is that, although no significant difference between the level of digital skills in the case of students and instructors was seen before the pandemic ( $MD = -.03, t = -.34, p > .05$ ), the completion timestamp indicated a

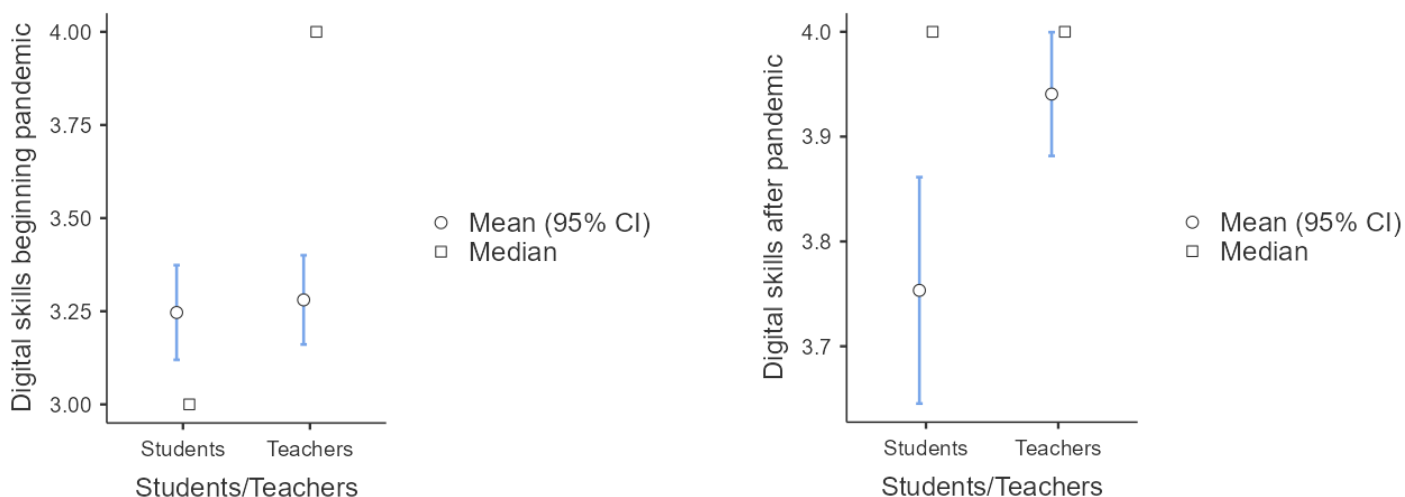
different reality, namely that instructors perceived a significant increase in their digital skills in comparison to students’ perceived digital savviness ( $MD = -.18, t = 3.24, p < .05$ ) (see Figure 1 below).

Table 2. Comparison between students and instructors’ perceived increase in digital skills

		Statistic	df	p	Mean difference
Digital skills beginning pandemic	Student's t	-0.345 <sup>a</sup>	451	0.730	-0.0339
Digital skills after pandemic	Student's t	-3.244 <sup>a</sup>	451	0.001	-0.1873

<sup>a</sup> Levene's test is significant ( $p < .05$ ), suggesting a violation of the assumption of equal variances

Figure 1. Comparison between students and instructors' perceived increase in digital skills beginning and after pandemic.



The analysis clearly show that instructors perceived a staggering increase in their level of digital skills, which can be accounted for by the active roles and decisive factor status that instructors had along the online educational process. By having to design and adapt teaching resources to an online format, they were guided by an intrinsic motivation and stringent need to upgrade their digital skills in order to accommodate new learning paths. Even if students were also required to adapt and acquire new skills, they did this under the guidance and support of their instructors, which explains this strongly visible line of progress.

As both students and instructors perceived an increased level of digital savviness, our analysis also focused on investigating the willingness to further use and explore interactive apps and tools in the instructional process, therefore putting to test these digital acquisitions. If the beginning of the pandemic generated online instruction format was marked by the discovery of a plethora of tools and apps to be used in language teaching, the next step was to challenge language instructors to test, select, and customise various apps in order to enhance interactivity, support

21st-century skills acquisition and to match the apps and tools with students' technical equipment which might not include particular affordances.

When asked about the students' preference for the hardware/device they use in online learning (*11. Which hardware or type of device would you most like to use for an online learning tool?*), the majority of the respondents (96) indicated personal computers/laptops as the most frequently used type of hardware, 43 respondents opted for smartphones as a tool used during online classes, whereas only 11 students chose the tablet. Even if most smartphones allow easy and quick access to a variety of apps, it may be more difficult for students to handle a synchronous learning session, solve tasks via apps, and switch between video conferencing environments and individual/collaborative language practice activities. On the other hand, the language instructors were required to use a laptop or personal computer in order to initiate and design online teaching sessions, while at the same time providing access and coordinating activities on digital platforms, in gamified apps, and facilitating interactivity among learners.

Table 3. Comparison between students and instructors' interest in using interactive online language learning tools.

Independent Samples T-Test

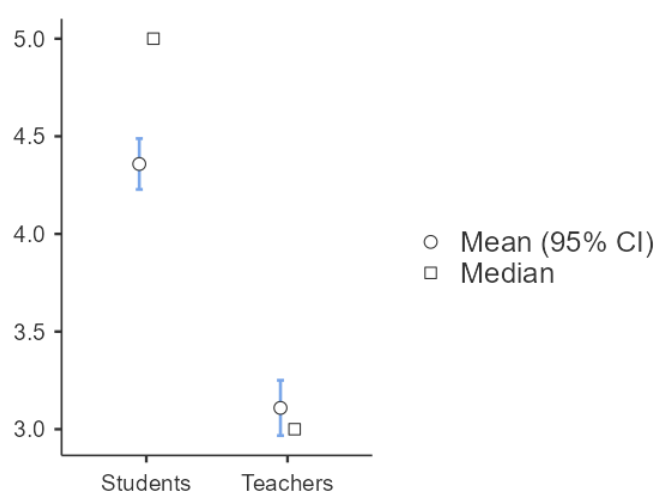
		Statistic	df	p	Mean difference
Interest in using interactive online language learning tools	Student's t	11.0 <sup>a</sup>	449	< .001	1.25

Note.  $H_a \mu_{Students} \neq \mu_{Teachers}$

<sup>a</sup> Levene's test is significant ( $p < .05$ ), suggesting a violation of the assumption of equal variances

While there is a growing interest in both instructors' and students' willingness to use apps and tools in the instructional process, it is the former who is an active designer, facilitator, feedback giver, and in the position of always monitoring the use of the app throughout the teaching sequence. By contrast, students are beneficiaries of this active role and, while enjoying the interactive features, they do not bear the complex responsibility of designing and coordinating the app-facilitated activities.

Figure 2. Comparison between students and instructors' interest in using interactive online language learning tools.



A further focus of our study is to evaluate the influence that gamification of language activities may have on class engagement, participation, and interactivity. Regarding the selection of gamified apps to enhance individual and collaborative language learning (Q24 from both teachers' and students' questionnaire: *What game-based/ gamified apps and platforms are suitable for enhancing language learning?*), the respondents' answers indicate clear preferences for Google forms (63 instructors and 96 students), Kahoot (52 instructors and 92 students) and Quizizz (42 instructors and 58 students). Minecraft (5 instructors and 9 students), iCivics (5 instructors and 0 students) and Onenote (16 instructors and 12 students) were selected among the last by both groups of respondents. While Google forms, Kahoot, and Quizizz appear to be the most popular apps (see also Mudure et al., 2023), it must be noted that such apps are only game-based apps (find literature to support this idea), being designed to contain elements that emulate games (gaining points, earning badges, podium). Most of such quizzes were used to practise topic-based vocabulary, grammar, reading comprehension, and listening skills and were often recycled from the existing database at times missing

customised features. The major affordances of these apps are that they enhance interactivity (students can compete in teams, they can also collaboratively create new activities using these apps), support engagement (an appealing and fun method of revising new vocabulary and grammar structures both synchronously and asynchronously) and participation (the reward systems can trigger active attendance on behalf of students).

The apps and platforms least indicated to generate interactivity, engagement, and participation (Minecraft, iCivics Games and OneNote) are different from the game-based apps indicated above in multiple senses. Firstly, they are gamification platforms, requiring instructors and students to take on the role of content creators. Secondly, they engage students in a more complex learning journey in which they don't just practise isolated micro-items and tasks, but rather complete a multi-dimensional learning pathway which embeds micro-language items (vocabulary, grammar) and macro-language skills (reading, listening, speaking, writing) along with transferable skills (critical thinking, digital skills, collaboration, problem-solving, etc.). Thirdly, these gamifying apps are based on different creative scenarios, which shift students' focus from the classroom environment to an alternative learning framework, enabling them to achieve milestones by using and putting to test all acquired language skills.

We can argue that the respondents' options are not surprising given the extent of selection, preparation and design required in the case of gamifying apps. Furthermore, integrating apps such as OneNote, iCivics or Minecraft to facilitate language instruction implies intermediate to advanced digital literacy on the part of language instructors, even if for students using such apps and platforms could be more intuitive and user-friendly. One notable remark would be that both game-based apps and gamified scenarios create an alternative informal learning environment in which students focus more on authentic tasks in which they practise language skills without acknowledging and being under the pressure of a formal pedagogical framework embedded in the instructional process.

With reference to identifying likes and dislikes that students identified related to the use of online learning tools and games (Q14: *What do you like most about the language learning games/online language learning tools that you know?* and Q15: *What do you like least?*) we sketch an overview of their responses



showcased in the word clouds from the two figures below (3 and 4).

The recurrent key words regarding positive aspects indicated by students as seen in Figure 3 below, *fun*, *creative*, *interactive*, *competition*, *interaction*, *easy to use*, *motivation*, *engagement*, *easy access*, confirm the previous premise that the use of digital tools and apps mimic an authentic informal learning environment. Without recognising and being constrained by a formal instructional process, students seize the opportunities created by gamified learning and thus perform in a more competitive, engaging, interactive context, learning together with their peers. A significant gain in terms of such digital tool usability in language instruction is that learners perceive the entire process as being *fun* and *interactive*, which clearly makes the language acquisition itinerary a more genuine endeavour.

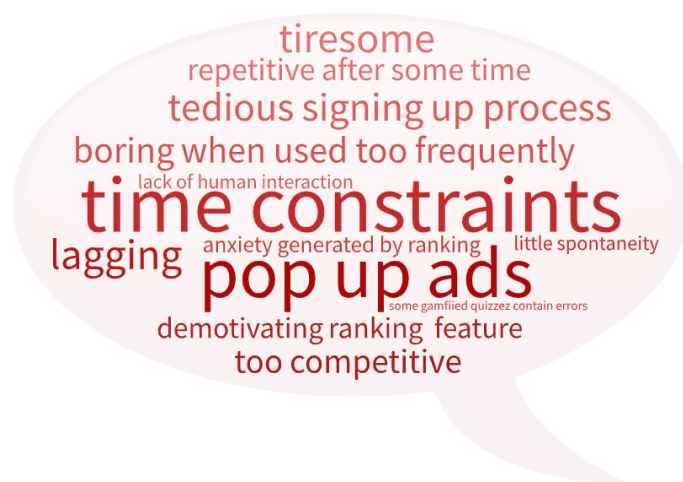
Figure 3. Positive aspects of online learning tools and games: students' perspective



As regards the negative aspects indicated by students in Figure 4 below, the prevalent key words indicate that the use of digital tools and apps in language instruction can be perceived as *tiresome*, *boring*, *lacking spontaneity*, *demotivating*, *repetitive* or *too competitive*. Other students referred to *time constraints*, *tedious signing up process* and the occurrence of *pop-up ads* along the gamified instruction to be weaknesses worth mentioning in this respect. We reckon that the first category of indicated drawbacks accounts for a lack of alignment with digital pedagogy on behalf of instructors, as the tendency (signalled by students as well) was to overuse some apps (many students mention at this point Kahoot!, Quizizz, Padlet in particular) and to miss on customising quiz content to learners' needs and levels. The second category of negative aspects

mentioned by respondents refers to the constraints of the app/ game (signing up process) and the fact that they are Internet products (pop-up ads). To this we interpret the *time constraints* weakness mentioned by students as a subjective perception, seeing that gamified apps all integrate timing as a core element that simulates gaming and stimulates competition. On the other hand, it is understandable that some students feel nervous/ anxious under the pressure of time and competition.

Figure 4. Negative aspects of online learning tools and games: students' perspective

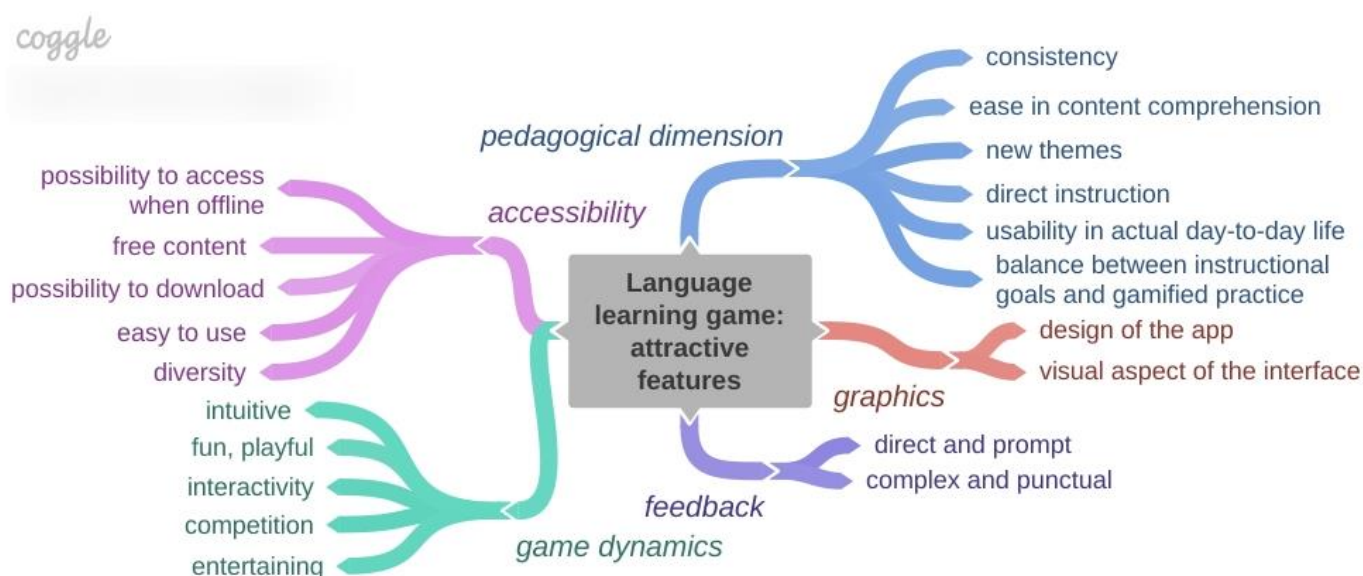


When asked about the features that make a language learning game/ tool attractive (*Q16: What is most important to make a language learning game/an online language learning tool attractive to you?*) students provided answers that were categorised in five main dimensions: game dynamics, the pedagogical dimension, accessibility, graphics, and feedback, as shown in Figure 5 below. In the *game dynamics* dimension, respondents (the majority having indicated a wide array of such features) referred to intuitiveness, playfulness, interactivity, fun, competition and entertainment. These answers show that the usual features of games are maintained along the instructional scope, supporting participation and motivating students to learn while at the same time having fun. Another dimension identified from the answers was the *pedagogical dimension*, indicated by many respondents who appreciated that language learning games/tools should be used in a consistent manner and should provide a balance between instructional goals and gamified practice. Likewise, they referred to the apps and tools' potential to facilitate content comprehension, direct instruction, introduce new themes and ideas, and can provide genuine learning experiences.

The *accessibility dimension* was ensured by the possibility to easily access content also offline and to download it and the diversity of open-educational resources (OER). These answers point to the fact that there is a growing tendency towards openness and collaboration in the educational process and that easy access to tailored resources both synchronously and asynchronously is an appreciated asset for students. Another feature that was well represented in students' answers referred to the *graphics* of the learning game/learning tool, students identifying the design of the app and the visual aspect of the interface as prerequisites of using such games in language learning. This can be explained in light of students' preference for daily use of devices and their digital native approach to communication, which calls for a

particular reconfiguration of teaching needs in the framework of language mediation. One final element identified by respondents as an attractive feature of language learning games was the direct, prompt, complex and punctual *feedback*. This is also a confirmation of the digital native status that most students have, in that they expect immediate and customised response to their completed tasks, activities and performance. An added-value of this kind of feedback is that it has a formative and ipsative nature allowing the teacher to observe and support learners' needs in real time, as well as allowing students to use the leaderboards generated by language games as an incentive to improve micro- and macro-skills.

Figure 5. Language learning game: attractive features



The two pillars of our analysis represented by two hypotheses were centred on the nexus between language mediation actors with a special focus on their perceived increase in digital skills, the way such skills are transferred to language instruction and the impact that gamification of language activities may have on language learners. The first hypothesis (*1. There is a significant increase in and a strong influence between the development of HE instructors and students' digital skills along the online teaching framework and, as a result, a growing interest in instructors' and students' willingness to use the interactive features of apps and tools in the instructional process.*) was partially validated, because the data shown indicates both instructors and students perceived a significant increase in digital skills (the former reporting a higher increase as compared to the latter), but there was no

significant influence of one category over the other. In what concerns the validation of the second hypothesis (*2. Gamification of language activities has a positive influence on class engagement, participation and interactivity.*), our research confirms that by using language learning tools and apps with gamified elements, regardless of the type of content, students have shown that engagement, participation and interactivity are well-appreciated features of gamified language activities.

## 5. Conclusions and Further Directions

The current study focussed on analysing the perception of foreign language HE instructors and HE students in Romania regarding the increase of digital skills as triggered by the ERT and the practical use of these digital skills in designing instructional content

and in exploring efficient educational methods for acquiring and improving language skills. Beyond the scope of using digital skills to mediate language content and tasks by means of digital tools and gamified/ game-based learning in ERT instruction, the purpose of this study is to highlight the potential that such apps, tools and gamification may have for reconfiguring the scenario of language classes in accordance to the current needs and interests of students. Another contribution provided by this research paper is that the results analysed in the study can constitute a valuable experience towards improving both the teaching and learning approach in the context of complex and ever-changing technological advances.

From the analysis of our respondents' answers, academic language instruction and learning are situated at an exploratory stage in terms of integrating and further developing digital skills for language mediation. With ERT functioning as a start button to making language mediation actors more aware of the benefits of digital tools, apps, and gamification/GBL and having identified a growing interest in using newly improved digital skills, the scope is to signal the need to implement these elements in mutually building more dynamic and interactive language instruction sessions.

Given the attractive features of language learning games as identified by our respondents (accessibility, graphics, feedback, game dynamics, pedagogical dimension) foster engagement, participation, and interactivity, these constitute valuable opportunities to be transferred into class assets. A niche segment that is still insufficiently explored in foreign language instruction in Romania consists of the insertion of gamification/ game-based learning as sustainable and creative resources, which might suggest that there is a gap between the immense potential of transforming the foreign language class and the actual on-site language mediation reality.

Future research might tap into embedding digital tools, gamification/ GBL into foreign language sessions by empowering learners to use their digital skills and develop alternative learning strategies in order to achieve more autonomy. By sharing autonomy in the language mediation process, instructors and learners can negotiate and mediate their in and out of class roles, with signalled benefits for both parties: transferable skills, autonomy and empowerment, motivation for learners and collaboration,

sustainability and lifewide and lifelong learning potential for teachers.

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