REVISTA KRONOS

Digital learning and gamification: a bridge to self-regulation practice on English foreign language

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ABSTRACT The digital era has revolutionized language learning in the case of English bringing opportunities for accessible education, personalized and innovative. Integrating the teaching formative process fosters communicative abilities, likewise, future teachers are equipped with these technologies to apply them in their forthcoming classes. Nowadays, digital learning resources introduce gamification to research how gamified digital learning resources improve language learning. On the other hand, mass connection type applications, instant messaging, and educational platforms increased their frequency of use because of the pandemic. As well as electronic devices such as smartphones, tablets, and computers. Another skill promoted parallelly was self-regulation so that students know their development curvature and learn how to keep their pace. Thus, the objective of this research is to analyze digital learning and gamification resources as a self-regulation bridge for learning English as a second language and to identify tools that promote the communicative skills practice of the language. Data gathering was a survey designed and then shared among higher education English bachelor students and teachers. This information was processed on spss which allowed us to use person correlation among our variables. The results showed teachers and students use digital tools and resources to foster communicative skills. Self-regulation, and digital learning and gamification evokes the practice of the language.

KEYWORDS Digital Learning, Gamification, Self-Regulation, EFL.

Aprendizaje digital y gamificación: un puente hacia la práctica de la autorregulación en lengua extranjera inglesa

RESUMEN La era digital ha revolucionado el aprendizaje de idiomas en el caso del inglés trayendo oportunidades para una educación accesible, personalizada e innovadora. Integrar el proceso formativo de enseñanza fomenta las habilidades comunicativas, así mismo, los futuros docentes están equipados con estas tecnologías para aplicarlas en sus próximas clases. En la actualidad, los recursos digitales de aprendizaje introducen la gamificación para investigar cómo los recursos digitales de aprendizaje gamificados mejoran el aprendizaje de idiomas. Por otro lado, las aplicaciones de tipo conexión masiva, mensajería instantánea y plataformas educativas aumentaron su frecuencia de uso debido a la pandemia. Así como los dispositivos electrónicos como teléfonos inteligentes, tabletas y computadoras. Otra habilidad promovida paralelamente fue la autorregulación para que los estudiantes conozcan su curvatura de desarrollo y aprendan a llevar su ritmo. Por lo tanto, el objetivo de esta investigación es analizar el aprendizaje digital y los recursos de gamificación como un puente de autorregulación para el aprendizaje del inglés como segunda lengua e identificar herramientas que promuevan la práctica de habilidades comunicativas del idioma. La recolección de datos fue una encuesta diseñada y luego compartida entre estudiantes y docentes de la licenciatura en inglés de educación superior. Esta información fue procesada en SPSS que nos permitió utilizar la correlación de Pearson entre nuestras variables. Los resultados mostraron que docentes y estudiantes utilizan herramientas y recursos digitales para fomentar habilidades comunicativas, autorregulación, aprendizaje digital y gamificación que evocan la práctica del idioma.

PALABRAS CLAVE Aprendizaje Digital, Gamificación, Auto-Regulación, Inglés como Segunda Lengua.

INTRODUCTION

Technology has been increasingly used in higher education around the globe. COVID-19 accelerated the adoption of technology in teaching and learning, however, the application of these resources in universities started before the pandemic. This transformation is observed everywhere including across Latin America and the Caribbean, despite the socio-economic, political, and technological contexts (United Nations of Educational, 2024).

In our country, the English language is being taught from the General Basic level to Higher Education to promote a population prepared in academic, scientific, and technological fields. Teaching the language was included in the curriculum since 1944 when the Ministry of Education promoted a national curriculum for 2.500 public elementary schools including 54 kindergartens, on the primary level. The secondary level had 25 public schools. The official plan of study for the secondary level included the English as a Foreign Language course with 3 hours of classes a week through the school year (Bravo & Alves, 2019). On the other hand, Higher education in Ecuador is opened through the Central University of Quito, the Universities of Cuenca and Guayaquil, the University School of Loja and the two Institutes of Higher Education and Letters of Quito and Guayaquil (Ebaugh, 1947).

Teaching policies from its creation have displayed diverse theory and methodological initiatives, such as the "Advance English Project" and the "Go Teacher Program", 2012; B2 minimum level requirement for teachers and implementation of the CLIL methodology, 2014; B1 level proficiency for secondary graduates, 2017 (Barre & Villafuerte-Holguin, 2021).

The English First English Proficiency Index (EF EPI) which assesses reading and listening showed lousy outcomes. The report published since 2011 is a global indicator of English proficiency level. Ecuador has had a rough position on the scale compared to other countries in the zone. In 2012 occupied 43rd position in "very low proficiency" behind Chile (39th), Venezuela (40st), and El Salvador (41st).

In 2018 Ecuador escalated to 65th position behind Peru (59th) and Colombia (60th), the Latin American region was the only one that experienced a decrease in English proficiency. Despite the numbers mentioned, our country in 2023 moved to the 80th place while Peru escalated to the 51st, Chile 52nd, Venezuela 56th, and Colombia 75th. (EF First Education, 2017, 2018, 2023).

In the context of the last pandemic outbreak which paralyzed all activities, an open gateway was found to implement virtuality to continue learning and teaching from our homes. In this scenario, is where platforms like Zoom, Teams, Google Classroom, and other communicative applications increased their use among the population demonstrating their effectiveness in the teaching-learning process.

Digital Learning is an increasingly diversified field that has been informed by decades of research into human learning, language learning, technological integration, human-computer interaction, and other varied aspects within educational and social sciences. Some English Foreign Language (EFL) researchers believe that learners enjoy their teaching activities by their means (Lilian et al., 2021; Nugroho & Mutiaraningrum, 2020). This offers personalization and flexibility for each student to plan, gather, manage, analyze, and report information (Lilian et al., 2021).

In addition, this configured learning environment allows to reduce the time-space barrier and turn the educational process engaging and interesting by a personalized teaching methodology. The DL involves technological features like ICT, artificial intelligence (AI), social networks, virtual educational platforms and multimedia content (Altamirano-Pazmiño et al., 2022).

In the DL Gamification, rewards are a strategy that is very used because of its mechanics and fun ideas based on games, this inspires action and enhances learning and problem-solving skills. It includes fun environments in the process of adding motivation and attraction (Canals; & Minguell, 2018). Quiroz et al., assert that gamification turns education immersive which evokes in students a dedicated feeling (Quiroz Peña et al., n.d.). Regarding the use of the strategy, another author like Dehghanzadeh asserts that it increases the students' argumentation development, critical thinking, and reasoning behavior (Dehghanzadeh et al., 2021). Gamified approaches contribute to students' language self-development as they are addressed to participate in the gaming mechanics.

(González et al., 2018) researched the level of English found in public system schools. They evidenced that teaching methodologies and didactic materials were inadequate, fundamentally due to a high tendency to combine simultaneous traditional translation techniques that carry an obstacle to achieving the objectives; Although there exists a technological relationship with users perfectly familiarized with the DL and its tools.

In the Ecuadorian Higher Education System, English Language is studied as a professional Second Language Teaching career and used as a tool for communication. Regarding teaching a second language, as a pedagogic career Ponce et al., assert that students who get into the higher level have not developed communicative skills due to a lack of assertive teaching methodologies and study plans on previous levels (Ponce et al., 2019).

According to Alvarez, teachers have identified the skills necessary to foster these competencies which include critical thinking and the incorporation of educational technologies in the teaching-learning process (Erazo-Álvarez et al., 2023). While it is true that digital learning can enhance the teaching-learning process, self-regulated work and the role of the student play an angular role in mastering the second language. In this sense, the research aims to analyze digital learning and gamification as a bridge to the practice of English as a second language and identify tools that facilitate communicative skills.

LITERATURE REVIEW

The introduction of teaching English as a second language in Ecuador dates back to the mid-twentieth century with the opening of 2,500 primary schools, 25 secondary schools, and the first higher education centers in several Ecuadorian cities (Ebaugh, 1947). In this way, the study of the English language became institutionalized and formalized at the different curricular levels.

By 1964, a scholar reform was extended to primary education, and within rural schools the development cycle was regulated to 6 years, aligning with urban schools. At the basic secondary level, a diversified study program was introduced to its 6-year cycle and English language teaching was maintained at 3 hours per week. On the other hand, public and private universities were granted autonomy for their academic and administrative activities ((Rieckmann et al., 2024). This led to a traditional, structural, and behaviorist teaching model being extended to the level.

By the 1980s, our country was affected by the problem of external debt, causing public spending on education to decrease drastically. This led to an increase in student dropouts and a profound neglect of the educational sector. In terms of teaching the second language, the traditionalist approach was maintained in such a way that the student was a figure who received information, the main skills that were developed were reading comprehension and writing (Intriago et al., 2019; Torres & Asqui, 2022).

Entering the 1990s, this traditional teaching paradigm was maintained in Ecuadorian universities, even though the use of recorders and videos was introduced, marking the

beginning of a new era. During this period, a change began to take shape, which is evident in the English Curriculum Reform Project (CRADLE), a joint effort between the British Council and the Ministry of Education whose objective was to innovate and strengthen the teaching-learning process of the English language to develop in students the necessary communicative competence through the linguistic competences of listening, reading, speaking and writing.

As a result, the subject of English is made compulsory in the Secondary Education curriculum and pedagogical centers are created for the training of English teachers with texts recommended by the project (Torres & Asqui, 2022).

By the beginning of 2000, the creation of a new Organic Law on Higher Education emphasized the need to promote science and technology through teaching, research, and the recognition of respect for all types of knowledge expressed scientifically. Regarding teaching of foreign languages, art. 3 states:

"…Preservar y fortalecer la interculturalidad, la educación bilingüe, la solidaridad y la paz…" (Asamblea Nacional, 2000)

At the beginning of the 21st century, the ten-year plan was implemented as a state policy, to improve education and strengthen educational institutions at a national level. It was designed by the Ministry of Education together with the National Council of Education. Regarding the teaching of a second language, the Ministry of Education evaluated the knowledge of 5,000 English teachers in 2012. The results revealed that 2.4% of those evaluated obtained level B2 of the Common European Framework (CEFR) through the First Certificate test of Cambridge University (Serrano et al., 2015).

In 2013, due to the fact most English teachers did not obtain B2 accreditation, the "Go Teacher" scholarship program was launched, to facilitate the development of teachers' communicative and didactic-methodological skills through internships and training in European, North American, and Caribbean universities. In addition, this program promoted language training at the master's level. In particular, the program sought to train specialized professionals so that they could act as replicators in the country, getting involved either in schools, colleges, or universities with foreign language teacher training programs (Intriago et al., 2019).

Beltran mentions that within the teaching-learning process, the role played by the student and the teacher is important, therefore, it is equally fundamental to maintain a relationship of respect, responsibility, and harmony. A correct combination of these elements will lead to significant achievements in the development of communicative competence in English (Beltrán, 2017).

For 2015, one of the greatest challenges facing Ecuadorian universities is to provide future professionals with competencies, knowledge, and skills, to ensure communication beyond local borders and that citizens are granted economic, linguistically, and politically world opportunities.

Universities and polytechnic schools, together with the Higher Education Council met to develop a generic curriculum proposal for education courses. Hence, the critical aspects of education are taken into consideration. This plan included the formation of the personal and professional development of the language teacher. Finally, the behaviorist, constructivist, and connectivism paradigms were references for academic instruction (Consejo de Educación Superior, 2015; Intriago et al., 2019)

Regarding digital learning, Almeida researched technology integration to the EFL classroom despite the benefits found, there is a gap between two types of users: native digital users and immigrant digital users. Most of the teachers are immigrant digital users while students are natively digital. Furthermore, this implies that their abilities to learn, communicate, and share thoughts are completely different. While native digital users are

comfortable surfing the net and multitasking with technological resources, immigrants' digital users schematize their discovery activities through the web (Almeida et al., 2017)

Cajas et al., point out some aspects of the standardized higher education curriculum that presented difficulties and influenced teaching English as a second language. The level of language proficiency, the adaptations of the curricular content and the academic training subjects, and the structure of pre-professional practices. Their data indicate that the reference objective of the English level handled by most of the universities consulted is B2, according to the MERC.

The curriculum proposed in the reform differs in terms of hours of academic instruction. This is reflected in the number of subjects covered throughout the training cycle. The official requirement included 41 subjects, despite this, the planners included additional subjects related to linguistics or teaching English.

Another analyzed aspect was the hourly distribution of pre-professional internships. According to the standardized proposal, the student in training must complete a total of 1,800 hours of internships in local educational units; However, this premise was not met by all institutions, since they considered that these were too many hours and in contrast to article 89 of the Academic Regulation Regime, which states that the number of hours of internship is 400. Therefore, the planners decided to adhere to the framework of the law. Finally, when the universities presented the curriculum for review to the CES, they did not present any new developments regarding this point (Cajas et al., 2023).

Currently, English as a foreign language is taught in universities as a tool and as a pedagogic course. Higher education institutions have designed their curricular plans considering the needs of future professionals and their field of action, setting pedagogical innovation and the integration of information technologies in the vocational training process.

It is acknowledged that the student and the teacher are the main actors in the teaching-learning process. And the role of the teacher today is to serve as a guide, which implies a high level of preparation, and handling of appropriate methodologies and techniques in the design of strategies for each student group.

DIGITAL LEARNING AND GAMIFICATION

Digital technology has taken an important role in education. Electronic communication devices, educational platforms, websites, and other technological elements such as artificial intelligence, audio and videos, podcasts, and videoconferencing have become very useful in second language instruction at different academic levels.

Shadiev and Yang conducted a bibliographical compilation in databases such as Web of Science and Scopus. Their research shows that online games and videos are technologies that are widely used in second language learning. The game is a resource defined within the recreational time of each young adult, therefore, playing is a crucial factor in learning. On the other hand, videos attract students' attention and awaken interest in language (Shadiev & Yang, 2020).

The impact of technology has allowed teachers to rethink how they are carrying out the educational process (Castillo, 2020). In addition, her research showed that most students have previously used digital games for academic purposes. However, none had played grammar or vocabulary games. Among the difficulties identified, grammatical structures such as phrasal verbs, infinitives, gerunds, and present perfect are mentioned.

Bećirović et al., see digital learning as the process of acquiring knowledge through electronic technology, which consequently empowers the second language teaching-learning process. Thus, an alternative to the traditional classroom environment is created (Bećirović et al., 2021).

At the higher academic level, digital technologies such as YouTube videos, Padlet, Quizizz, Kahoot, Prezi, Educaplay, and Canvas are used to improve the classroom environment and reinforce the teaching-learning process by including interactive and dynamic resources, among the most used are: **Youtube** is a streaming platform that allows you to watch and share videos. Although it was not designed for educational purposes, its versatility and diversity based on user experience has made it expand. Among its benefits is that it provides functionalities such as summarized content, provides clarity of complex concepts, explanation of domain-specific jargon, illustrations of abstract phenomena, and historical representations in filmed sequences (Greeves & Oz, 2023).

(Wahyuni & Utami, 2021) contested the use of Youtube to encourage speaking skills, a high average number of students believe this platform has suitable material, news, and debates. However, they mention that not everyone can select the right video according to their level.

Padlet is a real-time collaborative web platform. It has been designed as a virtual bulletin board, called "padlets". It helps to improve the learning of second language vocabulary, students share their experience and ideas. In this way, the sociocultural context relates to the relationship and interaction of concepts (Md Deni & Zainal, 2018).

Kahoot, is an interactive web-based gamification platform where students play through questions that are displayed on the screen. It contains a variety of fun activities that can be adapted to teaching a second language. It provides a shared learning experience for the entire study group.

Quizizz brings us the excitement of a video show-style game focused on learning English. It has a very diverse field of application and an extensive community. It is also a web-based gamification platform. It is focused on the student's pace, while the teacher can see the progress of the participants on the leaderboard and verify the correct and incorrect answers. In addition, it has immersive audio and integrates funny memes (Miller Matt, 2020).

Moreira and Freire conducted a study on educational innovation taking digital gamification as a reference. They used the Quizizz platform to develop formative assessment since this web resource offers features of a gamified environment such as a leaderboard, avatars, surround sound, and memes (Moreira & Lara Freire, 2024). Other authors like Pradnyadewi and Kristiani, researched fostering reading skills using Quizizz. They found that the use of this tool successfully helped the teachers to improve students' motivation in reading and learning outcomes (Pradnyadewi & Kristiani, 2021).

Other platforms such as **Prezi** and **Canva** are designed for creating presentations integrating graphics, images, videos, and audio. There is a wide variety of web platforms available on the Internet that teachers can incorporate into their virtual classroom besides artificial intelligence.

Digital learning allows the incorporation and combination of multiple tools and resources where the student can develop within interactive scenarios, skills such as reading and writing. Gamification is an immersive technique that allows students to create new ways of learning and discovering while redesigning and innovating the acquired experience. This technique is known as educational gamification. Canals and others point out that it consists of creating educational experiences through a game, from there they consider details about the elaboration of the activities and the environment such as the narrative, the content, the inclusion of musical elements, and more dynamic mechanics (Canals & Minguell, 2018).

According to data shown at the conference given by Luis Von Ahn, about 2 billion people are learning foreign languages, both inside and outside the academic framework, and 80% of these people are learning English. He quoted: that a fun way to learn foreign

languages on a mobile phone which is accessible to everyone is using applications like Duolingo (Von Ahn, 2023). Furthermore, the effectiveness of Duolingo in students' writing skills was researched by Faizah and others based on a pre-test and post-test where they evidenced that after performing writing activities on the application, they increased their scores in the post-test. Researchers did agree that this tool can improve writing thanks to features such as flashcards, translations, quizzes, listening sections, exercises, and others (Faizah et al., 2024).

Blau et al. points out that to conduct learning within digital environments, students require skills that can be achieved through digital literacy. This implies a challenge for the meaningful integration of technology in the academic field. The adequate development of digital literacy goes beyond an isolated skill; it involves generating a deep understanding of the digital environment, allowing the creation of new knowledge with other users (Blau et al., 2020).

SELF-REGULATION AS A LEARNING PRACTICE

The strengthening and development of human capacities has been pursued as part of anthropological growth. The ability of academic self-regulation within the process of learning a second language allows subjects to improve and plan their educational cycle. As a result, students in training develop linguistic skills.

Considering within digital environments this skill is required allowing a more participative action on the student's role in the teaching-learning process. This ability consists of a series of activities that help the person cultivate their communicative skills in a critical, active, and conscious way.

For Blau and others these actions include: 1- cognitive regulation, cognitive and metacognitive activities, that is, selecting and using a variety of cognitive strategies for memorization, learning, thinking, and problem-solving. 2- regulation of emotions and motivation, the regulation of conviction to increase motivation in learning, as well as strategies for controlling emotions. 3- regulation of behavior, selecting actions to control students' behavior. For example, planning study time to meet assignments and deadlines or planning effective strategies to achieve learning objectives. 4- contextual regulation, creating an environment that facilitates the completion of learning tasks (Blau et al., 2020).

Indeed, Blau and his colleagues describe a series of characteristics that are part of a systematic approach that seeks to support the ability of autonomous learning. On the other hand, Zimmerman defines self-regulation as a process that includes characteristics such as metacognitive, motivational, and behavioral, which are personally undertaken by students to acquire knowledge, allowing them to create skills such as: setting goals, planning, learning strategies, self-reinforcement, and self-instruction. Therefore, the educational approach to students' learning skills and the instructional environment have been configured as entities that develop autonomously (Zimmerman, 2001).

This type of strategy is student focused. Nevertheless, the teacher plays a facilitating and guiding role, mediating student participation. Thus, the classroom environment is transformed into a medium for sharing information and exchanging knowledge. Godwin-Jones sees new opportunities for independent second language learning through mobile devices and the increasing availability of streaming videos and other authentic materials in various languages. The choice of resources is wide and personal, but it undoubtedly draws the student into collective contact and learning opportunities among peers. Consequently, the concept of self-learning has moved from the individual perspective to more sociable contexts (Godwin-Jones, 2019).

METHODOLOGY

The aim is to analyze digital learning and gamification as a self-regulation bridge for the practice of English as a second language, a survey was conducted using google forms on the resources most used in the classroom by teachers and students. The State University of the Peninsula of Santa Elena was selected, since it shares similar characteristics with all the Higher Education Centers in the country, in the sense that they teach the teacher preparation course in English virtually from the first to third semester and adhere to the same educational policies at the national level.

The teaching program is organized into eight academic semesters, granting the Bachelor in National and Foreign Language Pedagogy degree. The levels of competence A1, A2, and B1 are linked to the first, second, and third semesters. A total of 672 hours is received virtually. The study population consisted of the 3 English teachers of each semester and 380 students. The students' response rate was 64.21%.

The survey was designed with closed-ended questions regarding the use of several platforms, self-regulation, and learning outcomes throughout each semester. Digital learning and gamification, and Self-regulation data retrieved were processed using statistical software SPSS and correlated using Pearson correlation.

RESULTS AND DISCUSSION

Learning English can be enhanced through self-regulation, using digital learning tools that are available to us today, in conjunction with gamification. This constitutes a pedagogical alternative that can be used at different levels and can be adjusted to the content and objectives of learning a second language as a training career.

The results show that digital tools are integrated into the professional training process that promotes the practice of English language skills. The following table shows the digital tools used by teachers regarding language skills in class.

Table 1: Digital tools used within virtuality. Self-elaboration.

Listening		Reading	
Podcasts	66.7%	Quizziz	33.3%
		ESL Lounge	33.3%
Book's digital platform Connected	33.3%		
		Diffit	33.3%
Writing		**Speaking**	
Padlet	33.3%	Role plays	33.3%
	66.7%	Storytelling	33.3%
Canvas		Audios	33.3%

Regarding the orientation of students' activities for practicing their second language abilities. Teachers elicit listening practice through podcasts and the digital book's platform Connected which evidence different manners to promote the skill. Each of them used different resources like Quizziz, ESL Lounge, and Diffit for reading. On the other hand, writing is

mostly practiced using Padlet. Also, Canvas is a good choice for producing written inter-action due to its friendly-user interface. Finally, the speaking ability was worked through activities like role plays, storytelling, and audio.

The digital tools used by students are shown in the following table.

Table 2. Digital tools used by students. Self-elaboration.

Listening		Reading	
Youtube videos	44.2%	Duolingo	50.9%
Films or series	34.3%	Quizziz	22.9%
Podcast	17.1%	Canvas	9.1%
Writing		**Speaking**	
Duolingo	40.9%	Youtube videos	38.0%
Microsoft Word	20.8	Duolingo	33.3%
Quizziz	16.7%	Recording app	19.7%

We found that teachers' digital tools do not necessarily match those of students. We are extending the use of digital tools to the English language training and practice process. As for Listening, YouTube videos, movies or series, and podcasts are the most used options.

Regarding Reading, they mostly make use of Duolingo, Quizziz, and Canvas applications. In congruence, (Faizah et al., 2024; Pradnyadewi & Kristiani, 2021) who analyzed how to improve language skills argued that digital tools due to the combination of resources such as flashcards, translations, and exercises improve the performance of this.

On the other hand, the practice of writing skills is exercised through the Duolingo application and is one of the most used resources, followed by the use of Word and Quizziz. Finally, about Speaking skills we have Youtube, Duolingo, and the use of a voice recording application.

The advance of digital technology is bringing with it more easily accessible tools, language skills are exercised within these environments, improving linguistic production. Regarding the difficulties encountered in working with these resources, teachers pointed out among them the quality of the internet, access to connection devices, and students with a low level of English.

The process of self-regulation is promoted by teachers through activities using gamified platforms such as Quizlet, Liveworksheets, and YouTube. However, they pointed out that Liveworksheets, is the most stimulating. On the other hand, with the help of these resources, they acknowledge a level of use identified as very good and good, showing that some aspects of technological integration must be improved.

From the students' point of view, regarding the digital platforms and gamification that they use to self-regulate their learning during their school process, they indicate that they most frequently use Quizziz (46.5%), followed by Kahoot (27.5%) and Quizlet (12.5%). When asked about learning management platforms, 51.6% of students agree that Zoom, followed by Moodle (21.8%), Canvas (13.0%), and Padlet (12.5%) are their best options.

Motivation plays an important role in self-regulation. Students are motivated to carry out activities organized by the teacher since it helps to improve their academic performance, is guided by the teacher, and contributes to enhancing autonomous skills.

On the chart below is the Pearson correlation table applied to the variables of our research which verified that there is a positive and moderate correlation relationship, and the influence of Digital learning and Gamification on Self-regulation is significant.

		Digital Learning and Gamification	Self-regulation
Digital Learning and Gamification	Pearson Correlation	1	,688**
	Sig. (bilateral)		,000
	N	244	244
Self-regulation	Pearson Correlation	,688**	1
	Sig. (bilateral)	,000	
	N	244	244

**. The correlation is significant at level 0.001 (bilateral).

According to (Shadiev & Yang, 2020) regarding the technologies used in learning a second language, they point out that games have been widely used. In 2019, there was an increased usage of technologies like online videos, automated feedback, websites, and digital resources.

Table 2. Technology used.

Technology \ Year	2014	2015	2016	2017	2018	2019	Total
Game	6	7	6	11	14	5	49
Online video	5	7	4	6	10	5	37
Collaborative writing	3	9	8	5	3	7	35
Corpus	8	5	9	5	2	3	32
Instant messaging	2	4	4	11	5	5	31
Automated feedback	6	4	4	4	5	6	29
Social networking	1	6	4	10	7	1	29
Websites and digital resources	3	2	5	6	3	6	25
Virtual reality	0	5	2	4	6	2	19
Speech recognition	0	3	5	4	3	3	18
Electronic gloss or annotation	3	1	0	3	2	1	10
e-Books	0	0	3	3	2	1	9
Electronic dictionary	2	0	3	1	1	1	8
Intelligent tutoring system	1	1	1	1	0	2	6
Voice recording	2	0	0	1	2	1	6
Augmented Reality	0	0	0	2	1	0	3
Robots	0	1	1	0	1	0	3
Clicker	0	0	0	0	1	2	3
Wearable devices	0	0	1	0	1	0	2
Course management system	2	0	0	0	0	0	2
Digital library	1	0	0	0	0	0	1
White board	1	0	0	0	0	0	1
Unidentified technology	7	6	9	5	9	12	48

CONCLUSION

This paper addressed a novel topic as an alternative opening door to a vast horizon of technological resources to learn and practice. This proposal analyzed digital learning and

gamification as a bridge to self-regulation in the English language formative career at the higher academic level. Self-regulation as a curricular component underpins students' development cycle. Therefore, the results showed teachers and students use digital tools and resources to foster communicative abilities.

Meanwhile, the teacher's role shows the path to learning and acquiring new knowledge. Technological resources provide feedback to the learner because results can be analyzed and visualized in countless ways to uncover underlying deficiencies.

It is a challenge for our generation and future generations to discover how to take advantage of digital tools, computers, the Internet, and smartphones, discovering new ways to boost our cognitive skills, memory, communication, and our ability to solve problems, collaborate, and coordinate (Lévy, 1999).

Transforming education is about being aware of the kinds of digital users and finding collaborative approaches to reach educational objectives. As mentioned by Almeida, learners and teachers share different perspectives on technology. The way today's students learn is distinct, they process information much faster than adult generations used to, and they are multitasked, visual, and cooperative. This is why teacher awareness is not only the key to properly engaging the young generation's skills; eliciting discovery and motivation through a technological approach while they build a sense of a cultural knowledge-sharing community.

Digital learning and gamification resources provide self-motivation and a deeper understanding of ESL, even though technological innovations grow fast due to society's diverse types of learners' needs. The state and its legislative bodies are responsible for investing in quality education access through policies and funds.

AUTHORS CONTRIBUTIONS

Eduardo Suárez: data collection and analysis, writing up the results, and manuscript discussion..

Evelyn Almeida: objective review; conceptualization (support), analysis (support); manuscript review and editing.

ETHICAL IMPLICATIONS

The authors declare that there are no ethical implications.

CONFLICT OF INTEREST

The authors declare that there are no financial or non-financial conflicts of interest that could have influenced the work presented in this article.

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