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Unlocking the Potential: Investigating the Interplay of Online and Classroom Feedback for Enhanced L2 Spanish Learning Experiences





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Abstract

Purpose: This study investigates how feedback provided through the Kahoot! platform influences student engagement and learning outcomes in Spanish language education. Focusing on the role of feedback within gamified learning environments, the research examines its effectiveness in enhancing student participation and achievement.

Methodology: This study conducts a systematic literature review (SLR) of 52 selected references to analyze the effectiveness of feedback in Spanish language instruction. The review focuses on the characteristics of feedback provided through Kahoot! and its role in enhancing student engagement and learning outcomes. The study also compares traditional teacher-provided feedback with AI-driven feedback mechanisms available on digital platforms.

Findings: The study identifies that feedback provided through Kahoot! is primarily constructive and aids students in overcoming challenges related to grammar, syntax, and vocabulary. The real-time nature of feedback enhances student engagement by fostering active participation and immediate rectification of errors. Additionally, the study finds that AI-driven feedback systems offer real-time insights that complement traditional teacher-based feedback, leading to improved student performance and motivation. However, challenges such as platform complexity and lack of comfort in using digital tools remain barriers to effectiveness.

Unique Contribution to Theory, Policy, and Practice: This study contributes to the understanding of feedback as a critical component of student engagement in language learning. The findings emphasize the importance of integrating both traditional and AI-driven feedback mechanisms to optimize learning outcomes. From a policy perspective, the study highlights the need for structured implementation of digital learning tools in educational institutions. In practice, the study provides insights for educators on leveraging game-based learning platforms to enhance student participation and performance in Spanish language acquisition.

Keywords: *Kahoot!, Spanish, Feedback, Student Engagement, Kahoot! in Education, Teacher-Provided Feedback, Blended Learning*





1.0 Introduction

Background for Review

Kahoot! is one of the major game-based learning platforms, developed in Norway, and widely used by teachers around the world to generate and utilise multiple-choice questions (MCQs), as analysed by Wang & Tahir (2020). The application was designed to help teachers engage students and regularly assess their language-related skills. Language learning consists of three major components: vocabulary, grammar, and syntax. These aspects can be effectively evaluated using digital platforms like Kahoot!, which has thus become an important tool in modern education.

Student engagement is a crucial element in the process of learning, particularly when acquiring a new language, as observed in the study by Hasnine et al. (2021). Engagement enhances the learner's willingness to participate and understand complex elements such as grammar rules and syntactic structures. Increased engagement leads to more active participation, especially in communicative tasks within the classroom setting, which is essential for developing speaking skills.

Digital platforms like Kahoot! facilitate the gamification of the learning process. This not only increases student motivation but also improves performance when compared to traditional classroom methods, as affirmed by Ratinho & Martins (2022). These platforms offer the flexibility to learn anytime and anywhere, thereby increasing both convenience and efficiency. In addition to the platform itself, teacher interaction plays a critical role in guiding student learning. One of the primary forms of interaction is feedback, which has been emphasised by Fortuna et al. (2023). Constructive feedback helps students identify and correct their mistakes, allowing them to improve their reading, speaking, and conversational skills in the target language; here, specifically Spanish. It is essential, however, that feedback remains encouraging and does not discourage learners from continuing to develop their language skills discourage students from the goal of learning new language skills. Thus, the role of feedback is important and needs to be considered. With the advancement of digital platforms for education, the feedback system has also shifted to educational platforms. Recent growth in AI systems has also introduced the concept of artificial intelligencebased feedback which can provide real-time feedback and then the teacher can utilise it to review student performance and then ensure proper teacher-based feedback is provided as an interaction with student to ensure the student is motivated and at the same time, makes rectification which can correct their mistakes and achieve their goal of learning Spanish. This research aspect is being addressed in the current paper through the development of SLR.

1.1 Research Objectives

• To analyse the different aspects in which Kahoot! is utilised in educational settings in face-to-face interaction in Spanish learning



- To explore different attributes of feedback provided by teachers with the aid of the Kahoot platform
- To investigate the impact and correlation between feedback offered through Kahoot! on student engagement
- To scrutinise student engagement with the feedback provided through the platform and different attributes of feedback
- To identify the relationship between student engagement to feedback in Kahoot! and achievement of learning outcomes
- To compare the effect of traditional gamified feedback on education platforms with AI-driven feedback on student engagement and achievement of learning outcomes

1.2 Research Questions

- What are the different aspects in which Kahoot! is utilised in educational settings in face-to-face interaction in Spanish learning?
- What are the different attributes of feedback provided by teachers with the aid of the Kahoot platform?
- What is the impact and correlation between feedback offered through Kahoot! on student engagement?
- How does the student engage with the feedback provided through the platform and different attributes of feedback?
- Is there a relationship between student engagement to feedback in Kahoot! and achievement of learning outcomes?
- What is the effect of traditional gamified feedback on education platforms and AI-driven feedback on student engagement and achievement of learning outcomes?

2.0 Inclusion and Exclusion Criteria

Inclusion and exclusion criteria have been adopted for the study in order to develop a systematic literature review. Timeline criteria for 2015-2023 have been adopted for the study. Further, all studies which have been published in English or can be easily translated into English have been adopted in the study. Further, all the studies which are openly accessible have been adopted for the study as such can be easily accessed by the reader. In the current study, all books as well as chapters and abstracts have been excluded from the study. Further, any study which focuses on other languages other than Spanish acquisition has also been excluded from the study. Finally, all studies which focus on college and university students have been excluded and only studies which focus on school students have been adopted. It should be noted that such criteria have been



established in the study in order to select studies which are relevant and also ensure information selection is of relevant quality. Thus, inclusion as well as exclusion criteria form the core of the selection of all relevant studies of which entire process and calculation aspects have been established in a later section.

3.0 Research Methodology

3.1 Search Strategy

The current study has been developed as a systematic literature review in order to select relevant and recent articles from major databases to analyse the results published and answer the research

questions. It should be noted that there are primarily two conditions for the selection of the SLR method, firstly allows establishing distinct criteria based on which the entire study will be done and secondly, an SLR allows synthesis and analysis of information published by scholars around the world who meet research criteria inadequate as well as systematic manner, hence reducing chances of bias which may occur if the normal literature review is done where the bias of selection of specific studies which match scholar preference regarding the domain can be given more emphasis upon, hence negatively influencing reliability and quality. The current study has adopted the PRISMA model approach based on prior studies which have been conducted by Page et al., (2021) and Page et al., (2021). The subsequent section will provide an extensive discussion of studies selected in each stage of the PRISMA model and at the same time, also provide a graphical representation which will aid in better analysis of the research methodology adopted by the scholar during the development of this SLR.

3.2 Methods for Study Selection and Appraisal

An initial search of studies from the Science Direct database has led to the development of an initial database which consists of 14547 articles in which different search criteria are adopted. Initial search has been done through the utilisation of different search strings namely "Kahoot! And Spanish", "Kahoot! And Feedback", "Kahoot! And Student engagement", "Kahoot! in education AND Spanish learning", "Kahoot! and Teacher-provided feedback", "Blended Learning and Spanish", "Blended Learning and Student Engagement". In the subsequent stage, all duplicates as well as titles were excluded which led to the selection of 11832 articles. After such selection, all articles which have been published in the selected timeframe of 2015-2023 have been adopted which led to the selection of 9624 articles. Now, all articles which are not open-access or easily accessible by any reader have been excluded which leads to the exclusion of 2484 articles or the selection of 2536 articles. Now, exclusion criteria of not considering any language other than Spanish and studies which focus on college students have been adopted, which led to the selection of 247 articles. The abstract of each article has been reviewed manually which led to the final selection of 52 articles which form the core of this SLR and have been analysed in the subsequent





Figure1: Selection Process of Relevant Studies for Maternal Expectations in Chanson douce

4.0 Research Results and Discussion

4.1 Feedback and Education Attributes

A proper education plan along with a proper focus on which aspect will be covered when is crucial



for education as noted in the study conducted by Iqbal et al., (2021) to utilise digital platforms and blended learning format without creating complexities for the student and hence ensuring better engagement. A continuously adaptability attitude has been considered to aid in the adoption of digital learning as covered in a study by Smith et al., (2021). Continuous improvement will ensure that student feedback and performance are considered which will lead to the development of a student-centric educational platform and plan which focuses on student performance improvement. The nature of the assessment and how such assessment is conducted is also an important aspect as covered by López-Jiménez et al., (2022). The traditional methods use MCQs, however, based on other studies, the nature and attribute of feedback also depend upon the nature of the assessment taken and how such can aid in student performance. The

frequency and speed of communication are crucial aspects, which according to a study by Saidi et al., (2021) ensures that students are able to access information anytime and also get feedback. In such a situation, AI-based initial feedback can aid teachers which can then be analysed by the teacher to ensure student engagement at continuous intervals. Teachers have been found to have positive perceptual regarding the blended learning method as highlighted by Kofar (2016). Positive teacher perception is considered crucial as such ensures teachers are willing to participate in the usage of such a system which will allow them to adopt digital tools in teaching foreign languages in school. The transition from learning to self-education can be done efficiently with the aid of digital platforms as evident from a study conducted by Dada et al., (2023). Such platforms can ensure each student is able to learn with the support of a teacher in the initial stage and finally learn without the need for teachers.

Timing of sessions and the structure of the entire curriculum is also important as noted by Staddon et al., (2022) who argued such aspects need to be decided beforehand as such allows to ensure how classes will run and ensures clarity between both teachers as well as students. The influence of gamification models has also been analysed in a study conducted by Kusuma et al., (2018). Such models can be used to improve the initial level of motivation and student engagement level, both of which are then expected to improve the performance of students in a new language in which smaller aspects are crucial. Facilitating conditions are also required for the adoption and implementation of a proper feedback system as covered in a study conducted by McHenry & Makarius (2023). These conditions range from students being able to use technology to teachers being able to provide feedback and address student needs, both of which need to be established through training. Micro planning and curriculum designing are also crucial aspects as covered in a study conducted by Soler et al., (2017). Micro planning involves breaking the entire subject into small portions so that each aspect can be covered and proper attention is given to coverage of language learning in each aspect from grammar to vocabulary. Aldalur & Perez (2023) noted in their study that the adoption of educational tools can improve study outcomes as such can be combined to provide discovery-based education as well where students discover new aspects of language independently and then utilise such concepts to build on their knowledge and address



any gap they have. A comparison of both online learning as well as blended learning in terms of effectiveness by Schmid et al., (2023) has highlighted blended learning to have more advantages as such ensures students can get their queries answered in class as well hence reducing fear of inadequate feedback in digital.

While considering the adoption of technology, the study conducted by Shakeel et al., (2023) shall also be considered who has highlighted that each language education program has basic, intermediate, and advanced skills and it has to be decided by the teacher by evaluating class performances and student aspect regarding feasibility of technology adoption. Student reception of teaching methods has been a major aspect, which has been found positive with respect to educational tools as noted in the study conducted by Fernández-Vega et al., (2021). Initial positive reception allows teachers to ensure students utilise the platforms which will lead to them addressing student needs and focusing on better performance. The blended learning process has been found to have a significant advantage over other methods as observed from a study conducted by Ruiz-Jimenez et al., (2022) who asserted teachers need to consider each aspect from learning to assessment and feedback regarding what will be done through application and which through traditional classroom method. Participation in the platform has been noted to mediate the influence of student engagement and performance as noted from a study by Fortuna et al., (2023) who also analysed the relationship with specific reference to Kahoot! The platform is increasingly being adopted by teachers for different subjects. Teachers have also been suggested as noted in a study by Khodeir (2018) to ensure that each student is given attention and use AI and other technological tools for ensuring each student's performance is tracked and then proper feedback and strategy are suggested which can aid in addressing such challenges. While considering the influence of Kahoot!, the study conducted by Ortiz-Martínez et al., (2022) shall evaluate who supported the adoption of such applications even in traditional settings when compared to students who learn only under the traditional method. This has been established by comparing student performance over common examinations.

4.2. Online Learning and influence on Student Engagement and performance

The Covid pandemic had a significant advantage for students in the adoption of a blended learning format, as observed from a study by Al-Kahtani et al., (2022) in which now the majority of the students have been noted to support a curriculum in which 75% is being covered remotely

and other 25% through physical education in the institution. However, a study conducted by Martín-Sómer et al., (2021) highlighted that the total increase of students decreased due to the adoption of Kahoot! An application which needs to be improved through the adoption of gamification and other elements which involve real-time feedback as well in order to ensure student shows more interest in learning. Nguyen et al., (2022) in the study highlighted that teachers are not required to completely change their curriculum due to the adoption of the blended learning method, they incorporate all aspects ranging from feedback to learning solutions while modifying



them to suit the needs of students who will learn language under blended learning format. However, students when considered about sociability and ability to connect with students in face-to-face conversation, as noted in a study by Briggs et al., (2023) have a negative perception regarding the process and do not like to engage in education through the adoption of digital education platforms for learning. Student experience needs to be considered as the core of learning as affirmed by Tavares (2022). While considering student experience, gamification of the curriculum must be done and Kahoot! The platform must be adopted which will lead to ensuring a higher rate of student engagement and achievement of better performance as well. Vocabulary development is a crucial aspect of language learning and a study by Sadeghi et al., (2022) has asserted that blended learning and the use of educational applications have significant advantage which results in better learning of vocabulary and other grammatical aspects hence ensuring better performance in the subject (here, learning the Spanish language).

The role of student gender is significant, however, such has no influence on the expected benefit of the adoption of digital platforms and influence on student engagement and outcome as affirmed by the study conducted by Almusharraf et al., (2023). Hence, the platform has a significant influence on students of both genders present in class. The ability to reflect upon learning through regular and continuous assessments without feeling burdened along with the ability to interact with the teacher are two aspects which need to be considered in the blended learning format as highlighted by Truss & Anderson (2023). These aspects are required to be clearly established in the context of ensuring interaction as well as feedback as covered in a study conducted by Sun et al., (2023). This will ensure both teachers, as well as students, know

at which stage what aspects they should expect in the platform during the curriculum. Interactivity and dialogue are also two aspects which need to be considered while developing such content and blended class platforms as evidenced by a study conducted by Kacetl & Semradova (2020). Further, it should be noted that these aspects need to be incorporated from the initial stage to ensure student engagement. Self-discipline among students is a major aspect which needs to be ensured by the teacher through continuous monitoring of applications as well as highlighted by Tomas & Poroto (2023). Teachers need to ensure students engage with the platform as and when required and adopt suggestions given by them in order to improve their skills. Anunpattana et al., (2021) noted such platforms provide the teacher with the ability to give dedicated attention to students which ensures feedback can be personalised with the aid of AI, teachers face fewer complexities and can address actual challenges which students face regarding engagement as well as performance in the class.

Teacher feedback, even without the presence of peer feedback is an essential aspect as covered in a study conducted by Molin et al., (2021). However, teachers are expected to provide constructive feedback and at the same time, also ensure students do not feel discouraged but rather continue their education. Support is a crucial aspect of any subject education, and Chiu (2021) noted digital



platforms provide a better aspect in this regard. Digital platforms aid in providing real-time as well as personalised feedback based on student performance which can ensure students are able to rectify errors and address all concerns to learn adequately. The role of teacher creativity has to also be considered as noted by Bereczki & Kárpáti (2021) who suggested teachers need to understand how to personalise the feedback based on the relationship they have with the student and student progress which will ensure each student gets attention and is able to learn efficiently. Competition and academic challenges are two major aspects which influence student performance, and Wirani et al., (2022) noted teachers should not ignore these aspects while designing curriculum and education aspects based on either digital platforms or the adoption of a blended learning format in teaching Spanish in the classroom. The major challenge which has been noted during the usage of such content is the utilisation of interactive learning resources as evident from a study conducted by Janes et al., (2023). Teachers need to ensure each element is designed in such a manner that student interacts with the teacher conveniently and is able to learn effectively.

4.3.Strategies for Blended and Online Learning

Wang & Tahir (2020) noted the challenge of Kahoot! exams being stressful due to time pressure as well as challenges of not being able to change answers after submission a major challenge which needs to be ge considered by teachers during the integration of the platform and giving feedback for such examinations. Artificial intelligence can have significant usage for the Spanish language as evident from a study conducted by Hasnine et al., (2021) which can examine student engagement and emotion across a wide range and suggest strategies for improving student engagement and at the same time, addressing barriers which can negatively influence student performance. It should be noted that Attard & Holmes (2020) asserted that language learning or any subject has several complexities on behalf of both teachers as well as students. In such situations, it becomes important for teachers to ensure that students are able to face such complexities with ease while they learn using platforms. Teacher motivational content is also an important factor whether considered as part of feedback or through curriculum, both of which are evident in the study conducted by Grabner-Hagen et al., (2023). Hence, teachers need to provide constructive feedback while at the same time, motivating students to address the errors. The digital gap has been a major challenge, especially for women students as highlighted in the study conducted by Palomares-Ruiz et al., (2021) when addressed with the aid of digital tools can improve educational performance in the classroom and hence ensure the achievement of a beneficial outcome for both students as well as teachers. Maya-Jariego et al., (2023) analysed teacher perception and training needs, in which the first aspect is of digital pioneers who encourage the adoption of such technological tools and then ensure the initial feedback system is developed based on curriculum needs and student expectations which need to be incorporated for Spanish language teaching as well.

The major challenge of such applications has been older technological tools being adopted as noted in a study conducted by Pikhart (2021). Hence, it has been suggested to adopt artificial intelligence



in each aspect of the application wherever feasible to ensure students are able to navigate through different aspects and learn in accordance with education objectives. Games, competition, and collaboration are three tools with which the educational performance of

students can be improved while using different educational platforms as noted in the study by de-Marcos et al., (2017) which also allows teachers to analyse student performance from various aspects and then give feedback accordingly to address student challenges. Teachers need to continuously evaluate the effectiveness of learning through student performance when gamification elements and digital platforms are adopted as affirmed in a study conducted by Nguyen-Viet et al., (2023). In this aspect, it becomes important for teachers to provide feedback in each stage and then evaluate how much influences the performance of the student. Al Ghawail & Yahia (2022) have argued that such applications allow for an anonymous feedback system which has been noted to aid students to engage in a more effective manner without fear of judgement from peers or bullying for their limited understanding. At the same time, such can allow teachers to understand challenges. The influence of such tools began during covid period even in native Spain as noted in a study conducted by López et al., (2023) who noted such tools were being used to address student education challenges which have emerged due to the closure of traditional education centres in the country. The long-term motivation aspect however has been noted to have declined in certain aspects as noted in the study conducted by Ratinho & Martins (2023). Hence, there is a crucial need among teachers to continue providing constructive feedback and at the same time, ensure students continue using the platform and engage with them in a coordinated manner.

Clement et al., (2023) in the study have provided an effective strategy in which the focus is given on transforming the curriculum into smaller lessons for which each student can utilise digital platforms and tools which aid them, hence providing both teachers as well as students with change to engage in collaborative education. While considering feedback, the level and frequency of interaction among students and teachers need to be ensured as noted by Tong et al., (2022). It should be noted that some students may be more comfortable in traditional interaction hence blended format is suggested to address the needs of each student in the classroom. A comparative analysis by Hubackova (2015) has suggested that in the case of learning languages, digital tools and the adoption of a blended learning format have more advantages when compared to traditional methods of communication. In such an aspect, teaching Spanish can also be inferred to be better done in a blended format than in a traditional manner. Gamification has been considered a crucial perspective, however, Martín-Sómer et al., (2024) argued that the final

benefit of any such aspect is witnessed through the assessment which is conducted, hence the entire aspect of student motivation, as well as student engagement and student performance, is evaluated based on assessment. Student perception of such digital tools and giving examinations in original curriculum based on such platforms has been found to be positive as noted from a study conducted by Bauk (2015). This study affirms the utilisation of such a platform to ensure better performance and achievement of learning outcomes for students.



4.4.Discussion of work with prior scholars

Artificial intelligence can be incorporated into a feedback system which teachers develop based on Kahoot! the system as affirmed by a study conducted by Law et al., (2020). Teachers can adopt artificial intelligence systems which can aid them by providing real-time analysis of the data providing initial feedback drafts and sending them to students. This aspect can aid students in getting real-time progress results while the teacher can evaluate them and engage in interaction with students in specific aspects during a specific timeframe, thus ensuring students are able to analyse updates in real time and also get detailed feedback from teachers to improve their performance. Student engagement through competition has also been covered extensively in this study which has also been supported as an educational system as noted by Vahdatikhaki et al., (2024). Gamification of the system can happen in the form of providing awards which can be both for scoring more in subjects or even in appearing for all examinations, which can act as a tool to promote a higher level of student motivation and engagement, which is one of the desired objectives in the current study. It should be noted that this aspect does not rely completely upon AI-based feedback but rather acts as a primary tool through which the AI system can gather information and suggest more personalised and tailored feedback hence requiring less intervention from teachers to rectify mistakes and engage more on student performance.

While the current study has noted the relationship between traditional teacher-based feedback and feedback which incorporates both teacher aspects as well as artificial intelligence tools, the study conducted by Serrano-Aguilera et al., (2021) shall also be considered which highlights the role of peer feedback in which AI system can act as coordinator and ensure the final goal of achieving higher performance scores for a student is achieved. This aspect can be considered for

teacher meetings and engagement as well in which the AI system can act as coordinator and provide teachers with the summary of major aspects and also track student progress against the standards and benchmarks which have been established by the teacher to further improve feedback system and student performance. A novel aspect of this strategy has been suggested in a study conducted by Mejico (2023) shall also be considered which has the potential to significantly influence feedback systems and improve the performance of students. A strategy of audio feedback is suggested in which AI-based vocal chatbots are adopted which can not only provide auditory comments but at the same time, highlight how to correctly pronounce different aspects of vocabulary and grammar which can especially aid in learning language skills. It should be noted that audio feedback is a critical system and shall be carefully used by teachers. Regular inspection of feedback shall be done by the teacher in an attempt to check whether the audio bot is working efficiently or not or is not providing any comment which actually leads to a negative influence on students regarding completion of the curriculum which can negatively influence research objectives of using the platform for enhancing the learning experience in Spanish.

AI incorporation in the platforms has also been noted to help in the incorporation of adaptive



quizzing aspects in education and assessment as highlighted in a prior study which has been conducted by Almotairy et al., (2023). AI algorithms can develop new quizzes which will be based both on existing curriculum and new aspects which are incorporated by teachers as well as feedback aspects on which improvement needs to be made. This aspect can aid students in checking the progress they have made with respect to feedback provided by them and at the same time, also aid teachers in understanding the efficiency of their feedback system and hence develop a new feedback system which will lead to improvement in the level of student engagement and performance as well. While discussing this aspect, the role of AI as a continuous supervisor and support system for students shall not be understated based on a study conducted by Cummings et al., (2020). AI systems can be used to track as well as visualise the progress of students in a given timeframe and based on that, teachers can incorporate different elements from emotions to technical aspects in the next feedback. It should be noted that as a continuous monitor, the AI system can provide feedback as soon as the student takes a test which can ensure students are able to understand the area where they need progress and then the AI system can provide both students as well as a teacher with a recommendations regarding the need for consultation either through call or physically regarding which aspects.

Hence, the current study as well as studies conducted by prior scholars have suggested the incorporation of artificial intelligence in different aspects ranging from providing real-time feedback after the completion of tests to aiding teachers during conversations. While considering this aspect, it is important to incorporate different strategies which can mitigate potential challenges such as bias in AI systems or challenges of cybersecurity as well. These challenges can lead to a negative influence on parents as well who may not like their students being taught using such applications which needs to be considered both by application developers as well as teachers.

5.0 Conclusions

Feedback is an important aspect in any educational aspect, especially during learning a foreign language as such ensures students are able to correct the mistakes they make in grammar, syntax, and vocabulary which forms the core of any language. The current study has considered this aspect with respect to learning Spanish which is one of the major languages around the world and has focussed upon a specific platform Kahoot! which was developed as a tool to aid in remote education and also aids students as well as a teachers to achieve education outcome in a swift, collaborative, and time-efficient manner. The current study has established that feedback provided through this platform has been noted to aid students in addressing their concerns and at the same time, promote a higher level of student engagement and also ensure better performance of the students which will lead to the achievement of educational outcomes. Challenges of lack of comfort and complexity in using platforms have been noted but such can be addressed with the aid of a systematic strategy which focuses on teaching students different aspects of platform usage and providing them dedicated support as such platform is crucial for the achievement of learning objectives and aids them in speaking efficient Spanish without any errors.



5.1.Limitation Of Study

Limitations are certain methodological and technical aspects which can negatively influence the reliability and credibility of the study. A primary limitation which has been noted during the development of SLR is studies which have been published in other languages than English, have been published before 2015 are currently in different stages of publication, or are not openly accessible have been excluded from the study as per the inclusion criteria. Further, the current study is entirely based on secondary data and hence no primary data has been collected which can aid in establishing empirical evidence of the influence of online as well as classroom feedback on improvement in the learning experience for Spanish. This has led to an exclusion of studies which does not match this criterion but rather may have had important insights which would have aided in the study. Additionally, the current study has only focussed on the Spanish language and also excluded studies which include both school and college students which have led to an exclusion of studies which might have focussed on other languages than Spanish and may have aided in the study regarding utilisation of Kahoot! application. Finally, the current study also has not considered demographic and gender aspects which might influence results.

5.2.Future Scope For Research

Future scholars shall consider this study as a foundational study which can be utilised to develop core theories on how to use Kahoot! Platform to ensure better student experience and hence aid in the achievement of Spanish language learning outcomes. The model can then be analysed with the aid of quantitative as well as qualitative research approaches which will aid in the analysis of the relationship both through empirical as well as subjective perspectives and thus aid in better understanding the situation of language learning and adoption. Further, experimental studies have been also suggested in which scholars can connect with educational institutions and engage in analysis over the period of curriculum (or for middle or other examinations). Based on such data, future scholars can aid in the expansion of knowledge in this domain by establishing practical processes adopted and at the same time, strategies adopted as well as challenges faced during actual implementation. Moreover, future scholars can also utilise the results which have been derived in this study to conduct practical studies in different regions around the world and also for other languages, which will aid in having a comprehensive understanding of how the

platform can be adopted in other studies and at the same time, improve learning outcomes for students globally.

References

- 1. Aldalur, I., & Perez, A. (2023). Gamification and discovery learning: Motivating and involving students in the learning process. *Heliyon*, 9(1).
- 2. Al Ghawail, E. A., & Yahia, S. B. (2022). Using the E-Learning Gamification Tool Kahoot!



to Learn Chemistry Principles in the Classroom. Procedia Computer Science, 207, 2667-2676.

- Al-Kahtani, N., Almurayh, A., Subbarayalu, A. V., Sebastian, T., Alkahtani, H., & Aljabri, D. (2022). Sustaining blended and online learning during the normal and new normal conditions in a Saudi higher education institution: health science students' perspectives. *Heliyon*, 8(10).
- Almotairy, M. M., Innab, A., Alqahtani, N., Nahari, A., Alghamdi, R., Moafa, H., & Alshael, D. (2023). Comprehensive licensure review and adaptive quizzing assignments for enhancement of end-of-programme exit examination scores in Saudi Arabia: a quasiexperimental study. BMJ open, 13(7), e074469.
- 5. Almusharraf, N., Aljasser, M., Dalbani, H., & Alsheikh, D. (2023). Gender differences in utilizing a game-based approach within the EFL online classrooms. *Heliyon*, 9(2).
- 6. Anunpattana, P., Khalid, M. N. A., Iida, H., & Inchamnan, W. (2021). Capturing potential impact of challenge-based gamification on gamified quizzing in the classroom. *Heliyon*, 7(12).
- 7. Attard, C., & Holmes, K. (2020). "It gives you that sense of hope": An exploration of technology use to mediate student engagement with mathematics. *Heliyon*, 6(1).
- 8. Bauk, S. I. (2015). Assessing students' perception of e-learning in blended environment: an experimental study. *Procedia-Social and Behavioral Sciences*, *191*, 323-329.
- 9. Bereczki, E. O., & Kárpáti, A. (2021). Technology-enhanced creativity: A multiple case study of digital technology-integration expert teachers' beliefs and practices. *Thinking Skills and Creativity*, *39*, 100791.
- Briggs, M. A., Thornton, C., McIver, V. J., Rumbold, P. L., & Peart, D. J. (2023). Investigation into the transition to online learning due to the COVID-19 pandemic, between new and continuing undergraduate students. *Journal of Hospitality, Leisure, Sport & Tourism Education, 32*, 100430.
- 11. Chiu, T. K. (2021). Digital support for student engagement in blended learning based on self-determination theory. *Computers in Human Behavior*, *124*, 106909.
- 12. Clement, M., Vandeput, L., & Osaer, T. (2016). Blended learning design: a shared experience.
- 13. Cummings, K., Stephens, T., & Horne, O. (2020). Evolving practices to improve student performance and efficiency in competency-based postsecondary technical training. The Journal of Competency-Based Education, 5(2), e01208.
- 14. Dada, D., Laseinde, O. T., & Tartibu, L. (2023). Student-Centered Learning Tool for Cognitive Enhancement in the Learning Environment. *Procedia Computer Science*, *217*, 507-512.
- 15. de-Marcos, L., García-López, E., & García-Cabot, A. (2017). Dataset on the learning performance of ECDL digital skills of undergraduate students for comparing educational



gaming, gamification and social networking. Data in brief, 11, 155-158.

- 16. Fernández-Vega, I., Jiménez, J. S. J., & Quirós, L. M. (2021). Uso de la app Kahoot para cuantificar el grado de atención del alumno en la asignatura de Anatomía Patológica en Medicina y evaluación de la experiencia. *Educación Médica*, 22, 375-379.
- 17. Fortuna, J. M., de la Fuente, G., & Velasco, P. (2023). Does gamification mediate the relationship between digital social capital and student Performance? A survey-based study in Spain. *The International Journal of Management Education*, 21(3), 100846.
- 18. Grabner-Hagen, M. M., & Kingsley, T. (2023). From badges to boss challenges: Gamification through need-supporting scaffolded design to instruct and motivate elementary learners. *Computers and Education Open*, *4*, 100131.
- Hasnine, M. N., Bui, H. T., Tran, T. T. T., Nguyen, H. T., Akçapınar, G., & Ueda, H. (2021). Students' emotion extraction and visualization for engagement detection in online learning. *Procedia Computer Science*, 192, 3423-3431.
- 20. Hubackova, S. (2015). E-learning in English and German language teaching. *Procedia-Social and Behavioral Sciences*, *199*, 525-529.
- 21. Iqbal, M. H., Siddiqie, S. A., & Mazid, M. A. (2021). Rethinking theories of lesson plan for effective teaching and learning. *Social Sciences & Humanities Open*, *4*(1), 100172.
- 22. Janes, G., Ekpenyong, M. S., Mbeah-Bankas, H., & Serrant, L. (2023). An international exploration of blended learning use in pre-registration nursing and midwifery education. *Nurse Education in Practice*, *66*, 103514.
- 23. Kacetl, J., & Semradova, I. (2020). Reflection on blended learning and e-learning-case study.
- 24. Khodeir, L. M. (2018). Blended learning methods as an approach to teaching project management to architecture students. *Alexandria engineering journal*, *57*(4), 3899-3905.
- 25. Kofar, G. (2016). A study of EFL instructors □ perceptions of blended learning. *Procedia*-*Social and Behavioral Sciences*, 232, 736-744.
- 26. Kusuma, G. P., Wigati, E. K., Utomo, Y., & Suryapranata, L. K. P. (2018). Analysis of gamification models in education using MDA framework. *Procedia Computer Science*, *135*, 385-392.
- 27. Law, Y. K., Tobin, R. W., Wilson, N. R., & Brandon, L. A. (2020). Improving student success by incorporating instant-feedback questions and increased proctoring in online science and mathematics courses. Journal of Teaching and Learning with Technology, 9(1).
- 28. López, R., Valarezo, Á., & Pérez-Amaral, T. (2023). Unleashing the potential of online learning in Spain: An econometric analysis. *Telecommunications Policy*, 47(6), 102544.



- 29. López-Jiménez, J. J., Fernández-Alemán, J. L., González, L. L., Sequeros, O. G., Valle, B. M., García-Berná, J. A., ... & Toval, A. (2022). Taking the pulse of a classroom with a gamified audience response system. *Computer Methods and Programs in Biomedicine*, 213, 106459.
- 30. Martín-Sómer, M., Casado, C., & Gómez-Pozuelo, G. (2024). Utilising interactive applications as educational tools in higher education: Perspectives from teachers and students, and an analysis of academic outcomes. *Education for Chemical Engineers*, *46*, 1-9.
- 31. Martín-Sómer, M., Moreira, J., & Casado, C. (2021). Use of Kahoot! to keep students' motivation during online classes in the lockdown period caused by Covid 19. *Education for Chemical Engineers*, *36*, 154-159.
- Maya-Jariego, I., Holgado-Ramos, D., Santolaya, F., Villar-Onrubia, D., Cachia, R., Herrero, C., & Giannoutsou, N. (2023). Teachers' personal network analysis reveals two types of pioneers in educational digitalization: Formal and informal intermediaries at schools. *Computers and Education Open*, 4, 100137.
- 33. McHenry, W. K., & Makarius, E. E. (2023). Understanding gamification experiences with the benefits dependency network lens. *Computers and Education Open*, *4*, 100123.
- 34. Mejico, A. (2023). Effects of Audio Feedback in an Online Assessment in Students' Academic Motivation. Journal of Education, Management and Development Studies, 3(3), 54-62.
- 35. Molin, F., Haelermans, C., Cabus, S., & Groot, W. (2021). Do feedback strategies improve students' learning gain?-Results of a randomized experiment using polling technology in physics classrooms. *Computers & Education*, 175, 104339.
- 36. Nguyen, L. T., Kanjug, I., Lowatcharin, G., Manakul, T., Poonpon, K., Sarakorn, W., ... & Tuamsuk, K. (2022). How teachers manage their classroom in the digital learning environment–experiences from the University Smart Learning Project. *Heliyon*, 8(10).
- 37. Nguyen-Viet, B., Nguyen-Viet, B., & Nguyen-Duy, C. (2023). Dataset on the effect of gamification elements on learning effectiveness among Vietnamese students. *Data in Brief*, *51*, 109734.
- 38. Ortiz-Martínez, E., Santos-Jaen, J. M., & Palacios-Manzano, M. (2022). Games in the classroom? Analysis of their effects on financial accounting marks in higher education. *The International Journal of Management Education*, 20(1), 100584.
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. International journal of surgery, 88, 105906.
- 40. Page, M. J., Moher, D., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & McKenzie, J. E. (2021). PRISMA 2020 explanation and elaboration: updated guidance and exemplars for reporting systematic reviews. bmj, 372.



- 41. Palomares-Ruiz, A., Cebrián-Martínez, A., García-Toledano, E., & López-Parra, E. (2021). Digital gender gap in university education in Spain. Study of a case for paired samples. *Technological Forecasting and Social Change*, 173, 121096.
- 42. Pikhart, M. (2021). Human-computer interaction in foreign language learning applications: Applied linguistics viewpoint of mobile learning. *Procedia Computer Science*, *184*, 92-98.
- 43. Ruiz-Jimenez, M. C., Martinez-Jimenez, R., Liceran-Gutierrez, A., & Garcia-Marti, E. (2022). Students' attitude: Key to understanding the improvement of their academic RESULTS in a flipped classroom environment. *The International Journal of Management Education*, 20(2), 100635.
- 44. Sadeghi, K., Sağlık, E., Mede, E., Samur, Y., & Comert, Z. (2022). The effects of implementing gamified instruction on vocabulary gain and motivation among language learners. *Heliyon*, 8(11).
- 45. Saidi, R. M., Sharip, A. A., Abd Rahim, N. Z., Zulkifli, Z. A., & Zain, S. M. M. (2021). Evaluating students' preferences of Open and Distance Learning (ODL) tools. *Procedia Computer Science*, 179, 955-961.
- 46. Schmid, R. F., Borokhovski, E., Bernard, R. M., Pickup, D. I., & Abrami, P. C. (2023). A Meta-Analysis of Online Learning, Blended Learning, the Flipped Classroom and Classroom Instruction for Pre-service and In-service Teachers. *Computers and Education Open*, 100142.
- 47. Serrano-Aguilera, J. J., Tocino, A., Fortes, S., Martín, C., Mercadé-Melé, P., Moreno-Sáez, R.,
 ... & Torres, A. (2021). Using peer review for student performance enhancement: Experiences in a multidisciplinary higher education setting. Education Sciences, 11(2), 71.
- 48. Shakeel, S. I., Haolader, M. F. A., & Sultana, M. S. (2023). Exploring dimensions of blended learning readiness: Validation of scale and assessing blended learning readiness in the context of TVET Bangladesh. *Heliyon*, 9(1).
- 49. Smith, C., Onofre-Martínez, K., Contrino, M. F., & Membrillo-Hernández, J. (2021). Course design process in a technology-enhanced learning environment. *Computers & Electrical Engineering*, 93, 107263.
- 50. Soler, R., Soler, J. R., & Araya, I. (2017). Subjects in the blended learning model design. Theoretical-methodological elements. *Procedia-Social and Behavioral Sciences*, 237, 771-777.
- 51. Sun, L., Kangas, M., Ruokamo, H., & Siklander, S. (2023). A systematic literature review of teacher scaffolding in game-based learning in primary education. *Educational Research Review*, 100546.
- 52. Tavares, N. (2022). The use and impact of game-based learning on the learning experience and



knowledge retention of nursing undergraduate students: A systematic literature review. *Nurse education today*, 105484.

- 53. Tomas, N., & Poroto, A. (2023). The interplay between self-regulation, learning flow, academic stress and learning engagement as predictors for academic performance in a blended learning environment: A cross-sectional survey. *Heliyon*, 9(11).
- 54. Tong, D. H., Uyen, B. P., & Ngan, L. K. (2022). The effectiveness of blended learning on students' academic achievement, self-study skills and learning attitudes: A quasi-experiment study in teaching the conventions for coordinates in the plane. *Heliyon*, 8(12).
- 55. Truss, A., & Anderson, V. (2023). The navigational challenges of a blended learning approach to teaching in business and management. *The International Journal of Management Education*, 21(1), 100733.
- 56. Vahdatikhaki, F., Friso-van den Bos, I., Mowlaei, S., & Kollöffel, B. (2024). Application of gamified virtual laboratories as a preparation tool for civil engineering students. European Journal of Engineering Education, 49(1), 164-191.
- 57. Wang, A. I., & Tahir, R. (2020). The effect of using Kahoot! for learning-A literature review.
- 58. Wirani, Y., Nabarian, T., & Romadhon, M. S. (2022). Evaluation of continued use on Kahoot! as a gamification-based learning platform from the perspective of Indonesia students. *Procedia Computer Science*, 197, 545-556.



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