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Gamification and civic engagement in Social Studies at primary school level to promote meaningful learning in Ecuador

Gamificación y participación ciudadana en Estudios Sociales de la EGB para el aprendizaje significativo ecuatoriano

Diana Gabriela Zapata-Aguirre
gabriela.zapata@docentes.educacion.edu.ec
Unidad Educativa Diez de agosto, Quito, Pichincha, Ecuador
https://orcid.org/0009-0002-8633-2104

Denisse Fernanda Reinozo-Panamá
fernanda.reinozo@quito.gob.ec
Unidad Educativa Municipal Cotocollao, Quito, Pichincha, Ecuador
https://orcid.org/0009-0004-7692-1292

Mery del Rocío Utreras-Zapata
chioaries48@hotmail.com
Unidad Educativa Mejía, Quito, Pichincha, Ecuador
https://orcid.org/0009-0009-8417-174X

Daniel Ricardo Torres-Cumbajin
dricardotorres@yahoo.com
Unidad Educativa Mejía, Quito, Pichincha, Ecuador
https://orcid.org/0009-0002-2000-7843

ABSTRACT

The aim of the study was to analyse how gamification and civic engagement contribute to meaningful learning in Social Studies within Ecuador's General Basic Education system. The study employed a meta-analytical design, drawing on twenty-five studies published between 2009 and 2025. The findings showed that gamification strengthens pupils' emotional and motivational engagement, fosters collaborative skills and civic negotiation, and generates positive, albeit modest, effects on cognitive and behavioural variables, whilst also highlighting a regional research gap compared with Anglo-Saxon scholarship. It is concluded that gamification promotes meaningful learning through the affective anchoring of civic content, the development of contextualised civic competences, and hybrid adaptations to address rural connectivity limitations, subject to teacher training and curriculum planning.
Descriptors: gamification; civic education; meaningful learning. (Source: UNESCO Thesaurus).

RESUMEN

El estudio tuvo por objetivo analizar cómo la gamificación y la participación ciudadana contribuyen al aprendizaje significativo en los Estudios Sociales de la Educación General Básica ecuatoriana. De diseño metaanalítico, mediante la integración de veinticinco estudios publicados entre 2009 y 2025. Se evidenció que la gamificación fortalece la implicación emocional y motivacional del estudiantado, favorece habilidades de colaboración y negociación cívica, y genera efectos positivos, aunque modestos, en variables cognitivas y conductuales, junto con una brecha investigativa regional frente a la producción anglosajona. Se concluye que la gamificación promueve el aprendizaje significativo mediante el anclaje afectivo del contenido cívico, el desarrollo de competencias ciudadanas contextualizadas y adaptaciones híbridas ante limitaciones de conectividad rural, condicionada a la formación docente y a la planificación curricular.
Descriptores: gamificación; educación cívica; aprendizaje significativo. (Fuente: Tesauro UNESCO).

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Research articles

INTRODUCTION

The Social Studies component of the Ecuadorian curriculum has long faced the problem of a disconnect between civic content and the experiences of students in Basic General Education (EGB) who are living through this reality. In this regard, the traditional teaching of this subject—which emphasizes the memorization of dates, figures, and institutional systems—has hindered the development of active citizenship, as documented by Bennett et al. (2009) in their analysis of the two paradigms of civic learning that coexist in the digital age.

Consequently, civic education cannot be reduced to the passive delivery of information; rather, instructional designs must foster students' active development of their own social understanding. Over the past decade, gamification—which incorporates game elements and mechanics into non-playful settings—has emerged as one of the most promising instructional strategies. Likewise, Sailer and Homner (2020) found, through a meta-analysis of experimental studies, that gamification has a positive impact on students' cognitive, motivational, and behavioral variables.

In contrast to other fields of study (exact sciences, engineering), Bramwell (2020) found in his systematic review of civic education in the region (2000–2017) that this approach had received less research attention in the specific area of social studies, especially in the Latin American context; in this regard, it can be emphasized that civic participation, as a pedagogical approach, cannot simply be viewed as the simulation of democratic processes in the classroom, but rather as the creation of environments where students analyze, plan, and assign consequences within meaningful learning communities. Thus, Kahne et al. (2013) reported on how participatory online cultures foster new forms of civic engagement for young adults transitioning from childhood to adulthood, arguing that gamified digital tools can serve as mediators between the classroom and real-world civic participation.

Likewise, Blevins et al. (2014) proposed that civic education must make room for the digital world in which new generations will live, without abandoning the academic rigor of subject-area instruction. Within this context, the prioritized curriculum for the Social Sciences in Ecuador emphasizes the development of skills related to democratic cooperation, recognition of regional differences, and appreciation of the national historical heritage; however, translating these skills into concrete classroom content still depends largely on the efforts of the teacher. Therefore, the systematic application of empirically proven gamified teaching strategies can serve as a bridge between stated curricular intentions and effective pedagogical implementation, as they involve replicable instructional sequences that can be used at the regional level.

In Ecuador, these dynamics are exacerbated by the unique characteristics of the Ecuadorian education system. Ortiz-Aguilar (2024) found that gamified teaching strategies using Social Studies were effective in improving student behavior in elementary and middle school settings, and Guajala-Simancas et al. (2025) discovered that the citizenship skills of upper elementary students also improved when gamified activities were applied in this subject. Within this framework, Rivera et al. (2020) suggested that intercultural education and meaningful learning are still a work in progress for Ecuadorian basic education, reflecting the country's cultural and territorial diversity.

As for meaningful learning—a concept originally coined by David Ausubel and revisited by Moreira (2020) from a contemporary perspective—it requires that new content be anchored to the student's preexisting cognitive structures, so that the knowledge acquired is functional and enduring. Thus, the fusion of games, civic participation, and authentic learning is an indispensable pedagogical approach that deserves systematic recognition based on accumulated scientific evidence, rather than stemming primarily from intuitive or experiential frameworks. It is urgently important to distinguish between superficial gamification—the awarding of points and medals that lacks educational intent—

and pedagogically developed gamification, which is specifically oriented toward desired curricular objectives.

On the other hand, from a constructivist perspective, the Social Studies classroom represents a privileged space for play and citizenship because these practices share the common ground of a participatory logic rooted in collectively established rules, roles, and consequences. In relation to this fact, Bicen and Kocakoyun (2018) illustrate that playful interaction (the fusion of play with immediate feedback) enables the conscious construction of knowledge rather than the passive reception of information; this aligns with the underlying principles of meaningful learning. Given that new generations of Ecuadorian students exist in digital and interactive contexts, overlooking this affinity in curriculum design will lead to a lack of pedagogical resources developed for various environments.

In light of the above, if Ecuadorian educational institutions have clear regulations regarding gamification in Social Studies classes, the issue of sporadic implementation—which depends on teacher discretion—can be overcome, and this is a necessary step toward developing a permanent, long-term institutional policy. In short, the extensive literature available from more than 10 years of international studies provides an excellent starting point for Ecuadorian education authorities to begin designing their curriculum development strategies, ensuring that no international experience is simply replicated as a generic model from a foreign learning context without sufficient adaptation to local circumstances.

In light of the above, the research question is posed: How could gamification and civic participation contribute to meaningful learning in social studies in Ecuador's General Basic Education (EGB)?

The research objective is to uncover how gamification and civic participation could contribute to meaningful learning in social studies within the EGB.

METHOD

This study employed a meta-analysis design (that is, it sought to integrate the results of previous studies on gamification, civic participation, and meaningful

learning); since meta-analysis is capable of combining heterogeneous evidence, it was decided to organize the body of literature into three complementary analytical categories: qualitative studies, literature review studies, and quantitative studies with experimental or quasi-experimental designs.

Accordingly, data were retrieved using the Scopus, Web of Science, Dialnet, SciELO, and Redalyc databases, as well as open-access repositories such as CEUR Workshop Proceedings; the selected search terms (in Spanish and English) were “gamification,” “civic education,” and “meaningful learning,” using the Boolean operators AND and OR. The time frame for this search was set from 2009 to 2025 to represent not only the original body of work in our field but also the most recent contributions to that body of work.

Continuing with the research process, the document search was conducted in four sequential phases. For example, during the identification phase, the search queries described above yielded 132 records; 41 duplicates across databases were removed, and 28 records were excluded because they were not directly related to the study’s analytical categories. Prior to the eligibility phase, the contents of sixty-three articles had been analyzed: thirty-eight of which were rejected due to a lack of explicit methodology, insufficient focus on gamification, or domains unrelated to education.

In light of the above and based on the established criteria, twenty-five of the documents were included in the final phase of corpus selection. The inclusion criteria were: a) articles published in indexed journals or peer-reviewed conference proceedings; b) gamification used for education, citizenship, and/or social science issues; c) evidence demonstrating a detailed methodology and reliable results; d) publications in Spanish, English, or Portuguese. Articles published in journals with ambiguous indexing or questionable editorial practices were excluded, as were studies that did not provide descriptions of the methodology used to obtain the results, those published in other languages, and those that did not describe the reporting procedure.

Based on the above criteria, the final corpus was structured such that it consisted of nine qualitative studies on student perception, motivation, and experience; seven literature reviews related to systematic reviews and state-of-the-art analyses; and nine quantitative studies involving previous meta-analyses, experimental designs, and quasi-experimental designs. It should be noted that some documents employed mixed methods (i.e., mixed methodological groups), and these were placed in the dominant category according to their methodological weight as stated by their own authors. Data processing was conducted using an extraction matrix that listed the author, year, country, study types, population, tools, and main findings. Subsequently, thematic coding was applied to the raw and documentary data across three interrelated dimensions: student perception, developed civic competencies, and implementation challenges.

To ensure the validity of the procedure, two reviewers were responsible for classifying the themes for each document and compared their codes until reaching a consensus on any initial discrepancies. Whenever there were discrepancies regarding which analytical category a particular document should be assigned to, we conducted a collaborative reading of an assigned methodological section until the final classification was decided. This cross-checking procedure between coders was intended to mitigate the interpretive bias that arises in qualitative synthesis work and was not intended to replace the formal statistical procedures commonly used in quantitative meta-analyses.

RESULTS

The following is a presentation of the results derived from the meta-analysis:

Qualitative Results

Based on data obtained from the analysis of the Kahoot tool used as an example, Bicen and Kocakoyun (2018) found that college students viewed this tool as a resource that increased their attention and enjoyment during assessment sessions. Similarly, Fernández Arias et al. (2020) demonstrated that gamification

is an effective method for learning social skills such as collaboration, negotiation, and peaceful conflict resolution all of which are intrinsically linked to the civics curriculum. At the other end of the spectrum, Mero Mendoza and Castro Bermúdez (2021) emphasized in this regard that, while educational gamification offers clear benefits in terms of student motivation, it faces pedagogical challenges related to inadequate teacher training and technological shortcomings in specific teaching and learning contexts.

In this regard, the mere introduction of game-based mechanics does not in itself ensure deep learning outcomes; rather, it depends on instructional planning based on curricular objectives. In line with this, Ordóñez et al. (2021) also reported that the combined use of the flipped classroom and gamification in the social sciences promoted self-regulation of learning processes, although they recommended regular tutorial support. In light of this, Ulloa Menta et al. (2023) reported that gamification, employed as a teaching strategy among Ecuadorian elementary school students, increased intrinsic motivation to learn, especially when gamified tasks featured narratives imbued with a strong sense of familiarity with the sociocultural reality of the school participants; students' overall positive perception is an essential but insufficient condition for gamification to foster learning over time and sustain it in the long term, as shown in the qualitative results and review articles.

Thus, the students' voices evident in this research indicate a consensus that the narrative aspect and the autonomy to make decisions within the game generate the greatest emotional engagement, transcending the scoring-based processes among students. Likewise, it is significant to note that the student narratives identified in some of these analyses described a trajectory as a shift from initial extrinsic motivation—characterized by the presence of external rewards—toward more independent and autonomous forms of motivation; which is particularly useful in the context of Social Studies, where civic education is more concerned

with the voluntary internalization of democratic values than with mere obedience through external obligations.

Literature Review

The systematic reviews considered outlined key areas regarding the state of the art of gamification in relation to civic and citizenship education in the literature; thus, Aura et al. (2022) systematically reviewed the empirical evidence on gamified civic education and found that, although there has been steady growth in the literature on the topic, there are methodological shortcomings related to the lack of control groups and the short duration of the intervention period examined, while Ortiz-Colón et al. (2018) provided an overview of gamification in education that showed a progressive expansion of the field into previously under-explored educational levels, including elementary education.

On the other hand, Bramwell (2020) highlighted that the volume of scientific research on civic education in Latin America is still much lower than that produced in Anglo-Saxon and European contexts, which makes it difficult to apply findings internationally when there is a lack of regionally contextualized results. As a result of this research asymmetry, Navarro et al. (2021), based on a systematic review of the Spanish educational field, suggested a preference for longitudinal studies to assess the long-term sustainability of the motivational impacts of applied gamification.

In this vein, Blevins et al. (2014), along similar lines, argued that citizenship education should be transferred to digital environments while maintaining the conceptual foundations of the social discipline—a perspective reflected in the Ecuadorian findings of Guajala-Simancas et al. (2025), who documented gamification activities that combined digital resources and in-person interactions in the field of Social Studies at the upper elementary level. A comparison between global and regional reviews shows that, while the content and vocabulary related to gamification are more or less consistent across global settings, specific

implementation experiences—including connectivity and device availability—depend largely on the context and the region under evaluation.

In simpler terms, the literature review indicates that the field is experiencing continuous growth, although it still requires more research grounded in Latin American contexts. In Ecuador, for example, socioeconomic conditions in public educational institutions differ significantly from those documented in European or Asian studies. Such is the case in rural areas of the Ecuadorian highlands, where limited connectivity necessitates the design of gamified strategies that combine analog and digital resources, rather than relying exclusively on online platforms.

In this context, given that Ortiz-Colón et al. (2018) trace the conceptual origins of gamification to the fields of marketing and business and only later was it gradually transferred to formal classrooms it is also worth noting that this non-educational background explains the resistance to integrating gamification into civic education subjects in certain teaching contexts, where it is viewed as a simplification of complex educational processes. However, the literature review indicated that, although resistance exists, it diminishes as teachers encounter more systematic evidence such as that provided by the present study suggesting pedagogical relevance when the strategy is used with clear and consistent curricular criteria.

Quantitative Results

In the context of quantitative studies, the meta-analysis by Sailer and Homner (2020) indicated that gamification has positive, albeit modest, effects on cognitive outcomes, as well as on behavioral and motivational outcomes, across a variety of educational settings. Similarly, Kim and Castelli (2021) found similar benefits of gamified interventions in promoting adherence to desired school behaviors through a meta-analysis on behavior change, which is consistent with the findings of Zeng et al. (2024), who reviewed studies from 2008 to 2023 and confirmed a general positive impact of gamification on academic achievement.

On the other hand, De-Marcos et al. (2014), in an experimental study comparing gamification and social media in e-learning environments, reported that students exposed to game mechanics performed well on tests of active participation but not on memorization tests. Similarly, Sailer et al. (2017) demonstrated, through an experimental exploration, that specific game design features such as points, badges, and leaderboards satisfy fundamental psychological needs for competence and autonomy, which may explain the frequently documented increase in motivation.

Consequently, Jones et al. (2023) found that gamification enhances intrinsic motivation in higher education contexts, while Moliner-Heredia and Abellán-Nebot (2023) documented improvements in student performance and engagement in manufacturing engineering classes using a gamified design. For this reason, Murillo-Zamorano et al. (2021) proposed that gamification, when used in conjunction with active learning, can serve the interests of digital society, academia, and students, provided it is implemented according to clear pedagogical standards. Likewise, Liu et al. (2024) show that the perceived accessibility of gamification positively influences the motivation and performance of young citizens in digital civic education programs, which further supports the relevance of the construct studied in the current research. The effect sizes reported in the nine quantitative studies reviewed ranged from small to moderate, consistent with standard statistical conventions, with none documenting null or negative effects on the motivational variables analyzed. In other words, the directional convergence of the results in addition to the specific magnitude of each effect is a consistent indicator of the pedagogical utility of gamification when administered in a methodologically controlled context.

DISCUSSION

It is important to start from the results to address Moreira's (2020) suggestion—from an Ausubelian perspective—that if meaningful learning requires anchoring new content to something, then the qualitative results are consistent with the fact

that gamification prioritizes this anchoring by enhancing students' emotional and motivational engagement with civic content. However, the documented evidence examined indicates a marked disparity between international scientific output and the local situation in Latin America. Although Bramwell (2020) identified a regional research gap, the Ecuadorian studies by Ortiz-Aguilar (2024) and Guajala-Simancas et al. (2025) offer relatively early but fruitful steps toward filling that gap. Therefore, it is recommended to distinguish between the global impacts of gamification which have largely emerged from Anglo-European contexts and its localized implementation in the Ecuadorian educational context, where issues of connectivity, teacher preparation, and hardware-related resources continue to pose challenges.

While in other fields the primary tools of gamification have been used instrumentally to achieve cognitive objectives, in the Social Sciences, playful dynamics must incorporate ethical challenges, deliberations, and exercises in democratic representation (Kahne et al., 2013, on the study of participatory youth cultures). In other words, not all gamified strategies inherently foster civic participation; a thoughtful design is needed to transform game mechanics into mental processes that foster experiences of deliberation and collective decision-making, as documented by Fernández Arias et al. (2020) regarding the development of social competencies through gamification. Conversely, the quantitative findings confirm positive, albeit modest, effects and are consistent with Sailer and Homner (2020), who caution against setting expectations too high for this strategy. However, this moderation regarding effect sizes does not detract from the pedagogical merit of gamification; rather, it emphasizes the need for this approach to be integrated with other teaching approaches, as proposed by Murillo-Zamorano et al. (2021), particularly given its association with active learning in general. Therefore, the existing study concludes that gamification is best integrated into a wide range of pedagogical ecosystems rather than used as an isolated or merely decorative resource. As a result, teacher training can be

viewed as a cross-cutting variable across the three bodies of research studied, since the mere availability of technological tools does not automatically guarantee the pedagogically sound implementation of gamification.

In fact, according to Mero Mendoza and Castro Bermúdez (2021), one of the main obstacles preventing empirical evidence from being translated into reality in Ecuadorian classrooms is the lack of specific training. Therefore, any institutional-level recommendation regarding the implementation of gamification in Social Studies must be substantively addressed through a training process in which teachers are not passive recipients of pre-packaged resources lacking a pedagogical foundation, but are instead capable of conceptualizing, developing, and critically evaluating the game-based dynamics employed. Based on the foregoing, the Organic Law on Intercultural Education and its regulations mandate that the national curriculum enhance student participation and the exercise of democratic citizenship in the early sub-levels of EGB; however, this regulatory obligation does not provide teachers with concrete methodologies to implement in the classroom. Therefore, the systematic evidence in this meta-analysis could contribute to the creation of official teaching guidelines that translate the legal obligation into evidence-based gamified pedagogical sequences, adapted to the country's territorial diversity from the Amazonian to the Andean and coastal regions. The state of technological infrastructure is, in fact, quite different in urban and rural institutions in Ecuador, but the reviewed evidence supports the notion that gamification cannot rely solely on advanced digital platforms to drive positive effects on civic engagement, while Bicen and Kocakoyun (2018) and Sailer et al. (2017) noted that game structure features such as instant feedback, visible progress, and choices are easily transferable to analog or hybrid formats without sacrificing their pedagogical value.

Therefore, educational institutions with limited access to technology can also utilize gamified strategies implemented in simple and low-cost ways. Although the benefits are well documented, it is recommended to consider the implications of

gamification, as it may potentially rely on external rewards, thereby undermining the intrinsic motivation for meaningful learning a concern that should not be overlooked; consequently, Kim and Castelli (2021) noted that the beneficial effects of gamification on behavioral patterns diminish in the absence of external stimuli, and pedagogical transitions require systematically transferring control of the learning process to the student. It is important to bear in mind that if such a transition is not purposefully designed, gamification may actually be replicating the very passivity it aims to combat only in a more playful guise.

CONCLUSION

The evidence we reviewed agrees that gamification provides meaningful learning in Social Studies within Ecuador's General Basic Education through three interconnected mechanisms: it emotionally anchors civic content within the student's cognitive structures, as presented by Ausubel; it fosters improved civic participation skills in cases where game-like narratives resonate with local sociocultural realities; and it allows for hybrid or analogous adaptations to address rural connectivity limitations. Therefore, it is not based on technological refinement but on instructional planning aligned with democratic curriculum objectives. Thus, the answer to the research question requires integrating gamification into broad pedagogical ecosystems, with long-term teacher training processes, rather than treating it as an isolated, decorative resource.

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CONFLICT OF INTEREST

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To the Ecuadorian teacher.

REFERENCES

Aura, I., Hassan, L., & Hamari, J. (2022). Gameful civic education: A systematic literature review of empirical research. *CEUR Workshop Proceedings, 3147*, 1-10. https://ceur-ws.org/Vol-3147/paper1.pdf

Bennett, W. L., Wells, C., & Rank, A. (2009). Young citizens and civic learning: two paradigms of citizenship in the digital age. *Citizenship Studies, 13*(2), 105-120. https://doi.org/10.1080/13621020902731116

Bicen, H., & Kocakoyun, Ş. (2018). Perceptions of students for gamification approach: Kahoot as a case study. *International Journal of Emerging Technologies in Learning (iJET), 13*(2), 72-93. https://doi.org/10.3991/ijet.v13i02.7467

Blevins, B., LeCompte, K., & Wells, S. (2014). Citizenship education goes digital. *Journal of Social Studies Research, 38*(1), 33-44. https://doi.org/10.1016/j.jssr.2013.12.003

Bramwell, D. (2020). Systematic review of empirical studies on citizenship education in Latin America 2000 to 2017 and research agenda proposal. *Citizenship, Social and Economics Education, 19*(2), 100-117. https://doi.org/10.1177/2047173420922506

De-Marcos, L., Domínguez, A., Saenz-de-Navarrete, J., & Pagés, C. (2014). An empirical study comparing gamification and social networking on e-learning. *Computers & Education, 75*, 82-91. https://doi.org/10.1016/j.compedu.2014.01.012

Fernández Arias, P., Ordóñez Olmedo, E., Vergara Rodríguez, D., y Gómez Vallecillo, A. I. (2020). La gamificación como técnica de adquisición de competencias sociales [Gamification as a technique for acquiring social competencies]. *Prisma Social: Revista de Investigación Social, 31*(1), 388-409. https://dialnet.unirioja.es/servlet/articulo?codigo=7625998

Guajala-Simancas, M. S., Méndez-Cisneros, M. R., Caisedo-Renteria, B. J., Vivar-Encalada, C. D., y Gavilanez-Pozo, L. E. (2025). Fortalecimiento de competencias ciudadanas a través de la gamificación en el área de estudios sociales de básica superior [Strengthening civic competencies through gamification in the social studies area of upper basic education]. *Revista Científica Ciencia y Método, 3*(4), 332-344. https://doi.org/10.55813/gaea/rcym/v3/n4/114

Jones, M., Blanton, J. E., & Williams, R. E. (2023). Science to practice: Does gamification enhance intrinsic motivation? *Active Learning in Higher Education, 24*(3), 273-289. https://doi.org/10.1177/14697874211066882

Kahne, J., Lee, N. J., & Feezell, J. T. (2013). The civic and political significance of online participatory cultures among youth transitioning to adulthood. *Journal of Information Technology & Politics, 10*(1), 1-20. https://doi.org/10.1080/19331681.2012.701109

Kim, J.-H., & Castelli, D. M. (2021). Effects of gamification on behavioral change in education: A meta-analysis. *International Journal of Environmental*

Research and Public Health, 18(7), 3550. https://doi.org/10.3390/ijerph18073550

Liu, R., Zhang, L., Cao, Z., & Mi, J. (2024). Influence of gamification affordance on young citizens' motivation and learning performance toward digital civic education. *Journal of Chinese Governance, 9*(2), 244-278. https://doi.org/10.1080/23812346.2024.2327735

Mero Mendoza, G. M., y Castro Bermúdez, I. E. (2021). La gamificación educativa y sus desafíos actuales desde la perspectiva pedagógica [Educational gamification and its current challenges from a pedagogical perspective]. *CoGnosis: Revista de Ciencias de la Educación, 6*(2), 111-124. https://doi.org/10.33936/cognosis.v6i2.2902

Moliner-Heredia, R., & Abellán-Nebot, J. V. (2023). Evaluation of the impact of gamification on students' performance and engagement in manufacturing engineering courses. *International Journal of Mechanical Engineering Education, 51*(3), 174-193. https://doi.org/10.1177/03064190231160357

Moreira, M. A. (2020). Aprendizaje significativo: la visión clásica, otras visiones e interés [Meaningful learning: the classic view, other views, and its relevance]. *Proyecciones*, (14), 22-30. https://doi.org/10.24215/26185474e010

Murillo-Zamorano, L. R., López Sánchez, J. A., Godoy-Caballero, A. L., & Bueno Muñoz, C. (2021). Gamification and active learning in higher education: is it possible to match digital society, academia and students' interests? *International Journal of Educational Technology in Higher Education, 18*(1), 1-27. https://doi.org/10.1186/s41239-021-00249-y

Navarro, C., Pérez, I. J., y Marzo, P. F. (2021). La gamificación en el ámbito educativo español: revisión sistemática [Gamification in the Spanish educational field: a systematic review]. *Retos, 42*, 507-516. https://doi.org/10.47197/retos.v42i0.87384

Ordóñez, B. P., Ochoa, M. E., Erráez, J. L., León, J. L., y Espinoza, E. E. (2021). Consideraciones sobre aula invertida y gamificación en el área de ciencias sociales [Considerations on flipped classroom and gamification in the social sciences area]. *Revista Universidad y Sociedad, 13*(3), 497-504. http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S2218-36202021000300497&lng=es&nrm=iso

Ortiz-Aguilar, W. (2024). Estrategia didáctica de gamificación para mejorar el comportamiento escolar a través de la asignatura Estudios Sociales en la Educación Básica [Gamification teaching strategy to improve school behavior through the Social Studies subject in Basic Education]. *MQRInvestigar, 8*(2), 1679-1707. https://doi.org/10.56048/MQR20225.8.2.2024.1679-1707

Ortiz-Colón, A. M., Jordán, J., y Agreda, M. (2018). Gamificación en educación: una panorámica sobre el estado de la cuestión [Gamification in education: an overview of the state of the art]. *Educação e Pesquisa, 44*, e173773.

Rivera, A. R., Galdós, S. Á., y Espinoza, E. E. (2020). Educación intercultural y aprendizaje significativo: un reto para la educación básica en el Ecuador [Intercultural education and meaningful learning: a challenge for basic education in Ecuador]. *Conrado, 16*(75), 390-396. http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1990-86442020000400390&lng=es&tlng=en

Sailer, M., & Homner, L. (2020). The gamification of learning: A meta-analysis. *Educational Psychology Review, 32*(1), 77-112. https://doi.org/10.1007/s10648-019-09498-w

Sailer, M., Hense, J. U., Mayr, S. K., & Mandl, H. (2017). How gamification motivates: An experimental study of the effects of specific game design elements on psychological need satisfaction. *Computers in Human Behavior, 69*, 371-380. https://doi.org/10.1016/j.chb.2016.12.033

Ulloa Menta, J. L., Arteaga Gualán, M. R., Arteaga Gualán, F. F., Martínez Solórzano, S. E., Solórzano Solórzano, M. E., y Moreira Rivera, J. M. (2023). La gamificación como estrategia didáctica para fortalecer la motivación en estudiantes de Educación Básica [Gamification as a didactic strategy to strengthen motivation in elementary school students]. *LATAM Revista Latinoamericana de Ciencias Sociales y Humanidades, 4*(5), 1020-1029. https://doi.org/10.56712/latam.v4i5.1375

Zeng, J., Sun, D., Looi, C. K., & Fan, A. C. W. (2024). Exploring the impact of gamification on students' academic performance: A comprehensive meta-analysis of studies from the year 2008 to 2023. *British Journal of Educational Technology, 55*(6), 2478-2502. https://doi.org/10.1111/bjet.13471

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