Teacher training for the use of Genial.ly as a gamifiable tool in the teaching of Language and Literature for students with intellectual disabilities.

(es) Capacitación docente para el uso de Genial.ly como herramienta gamificable en la enseñanza de Lengua y literatura para estudiantes con discapacidad intelectual.

(port) Treinamento de professores para o uso do Genial.ly como uma ferramenta de gamificação no ensino de idiomas e literatura para alunos com deficiência intelectual.

Jessenia del Carmen Figueroa Chevez
Universidad Bolivariana del Ecuador
jdfigueroac@ube.edu.ec
https://orcid.org/0009-0009-0441-0481

Silvia Esther Cruz Alay
Universidad Bolivariana del Ecuador
secruza@ube.edu.ec
https://orcid.org/0009-0006-6858-2002

Jess Ivette Méndez Forns
Universidad Bolivariana del Ecuador
imendez@ube.edu.ec
https://orcid.org/0000-0003-4874-8248

Peggy Danny Ricaurte Ulloa
Universidad Bolivariana del Ecuador
pdricaurteu@ube.edu.ec
https://orcid.org/0009-0002-7596-0922

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Abstract (en)

The research aims to propose a teacher training plan for the use of Genial.ly as a gamification tool in the teaching of Language and Literature, for students with intellectual disabilities in the first year of technical high school in the Educational Unit "Province of Cotopaxi". The scientific problem responded to how to contribute to improve the use of Genial.ly as a gamification tool for teaching Language and Literature in the first year of high school in the Educational Unit "Provincia de Cotopaxi"? Applied research was conducted, with a mixed approach and empirical methods were used for data collection such as the survey, based on three dimensions and seven indicators. The results reflect the significant lack of theoretical and practical knowledge about gamification with the use of Genial.ly in the subject, the year studied and the characteristics of the students. The specialists emphasized that the proposal is valid and favors the preparation of teachers to use taking into account the needs of the students. Its implementation evidenced changes in the preparation of teachers to be able to adequately serve students with intellectual disabilities with the use of this tool. The methodology employed demonstrated that Genial.ly not only facilitates adaptive learning but also promotes an inclusive and accessible environment. These findings highlight the importance of continuous teacher training in inclusive digital technologies, promoting pedagogical innovations in diverse educational contexts.

Keywords: Teacher training; Genial.ly; Gamification; Inclusive education; Intellectual disability

Resumen

La investigación tiene como objetivo proponer un plan de capacitación docente para el uso de Genial.ly como herramienta gamificable en la enseñanza de Lengua y literatura, para estudiantes con discapacidad intelectual de primer año de bachillerato técnico en la Unidad Educativa "Provincia de Cotopaxi". El problema científico respondió a ¿cómo contribuir a mejorar el uso de Genial.ly como herramienta gamificable de enseñanza de Lengua y literatura en primero de bachillerato en la Unidad Educativa "Provincia de Cotopaxi"? Se realizó una investigación aplicada, de enfoque mixto y se emplearon métodos empíricos para la recolección de datos como la encuesta, basada en tres dimensiones y siete indicadores. Los resultados reflejan la falta significativa de conocimiento teórico y práctico sobre la gamificación con el uso de Genial.ly en la asignatura, el año estudiado y las características de los estudiantes. Los especialistas destacaron que la propuesta es válida y favorece la preparación de los docentes para utilizar teniendo en cuenta las necesidades de los estudiantes. Su implementación evidenció cambios en la preparación de los docentes para poder atender adecuadamente a los estudiantes con discapacidad intelectual con el uso de esta herramienta. La metodología empleada demostró que Genial.ly no solo facilita el aprendizaje adaptativo, sino que también promueve un entorno inclusivo y accesible. Estos hallazgos resaltan la importancia de una capacitación docente continua en tecnologías digitales inclusivas, promoviendo innovaciones pedagógicas en contextos educativos diversos.

Palabras claves: Capacitación docente; Genial.ly; Gamificación; Educación inclusiva; Discapacidad intelectual

Resumo

A pesquisa tem como objetivo propor um plano de formação de professores para o uso do Genial.ly como ferramenta de gamificação no ensino de língua e literatura, para alunos com deficiência intelectual no primeiro ano do ensino médio técnico na Unidade Educacional "Província de Cotopaxi". O problema científico respondeu a como contribuir para melhorar o uso do Genial.ly como ferramenta de gamificação no ensino de língua e literatura no primeiro ano do ensino médio da Unidade Educacional "Província de Cotopaxi". Foi realizada uma pesquisa aplicada, com uma abordagem mista e foram utilizados métodos empíricos para a coleta de dados, como a pesquisa, com base em três dimensões e sete indicadores. Os resultados refletem a significativa falta de conhecimento teórico e prático sobre gamificação com o uso do Genial.ly na disciplina, no ano cursado e nas características dos alunos. Os especialistas destacaram que a proposta é válida e favorece a preparação dos professores para utilizá-la, levando em conta as necessidades dos alunos. Sua implementação evidenciou mudanças na preparação dos professores para que possam atender adequadamente aos alunos com deficiência intelectual com o uso dessa ferramenta. A metodologia empregada demonstrou que o Genial.ly não apenas facilita a aprendizagem adaptativa, mas também promove um ambiente inclusivo e acessível. Essas descobertas destacam a importância do treinamento contínuo de professores em tecnologias digitais inclusivas, promovendo inovações pedagógicas em diversos contextos educacionais.

Palavras-chave: Capacitação docente; Genial.ly; Gamificação; Educação inclusiva; Deficiência intelectual.

Introduction

Educational inclusion is a model that focuses on ensuring equality and equity of opportunities for all students, regardless of their individual characteristics or specific needs. In this context, the "Provincia de Cotopaxi" Educational Unit faces the challenge of ensuring that its teachers are adequately prepared to implement inclusive pedagogical strategies in the first year of Baccalaureate, a crucial stage in which students begin to specialize in areas that will influence their academic and professional future.

Educational inclusion has gained global relevance in recent decades, promoting a pedagogical approach that seeks to guarantee equal opportunities and quality education for all students, including those with disabilities. In Ecuador, the Organic Law on Intercultural Education (LOEI) establishes a legal framework that supports this right, emphasizing the need for inclusive methodologies and didactic resources adapted to the characteristics of students with intellectual disabilities. Despite these provisions, in many institutions significant challenges persist in the implementation of appropriate approaches and tools that respond to the needs of these students, affecting their learning process and their participation in the educational environment (Fuentes, 2023).

Inclusive education, as a pedagogical approach, has gained relevance in recent decades, "driven by the need to ensure that all students" (Sumba-Portillo, 2016), regardless of their abilities and specific needs, have access to quality education (Bravo et al., 2024). This paradigm has been reflected in multiple educational policies at the global level, including the Ecuadorian context, where the Organic Law on Intercultural Education (LOEI) establishes a legal framework that ensures the inclusion of students with disabilities in the regular education system.

In this context, seen as a key principle to guarantee equality and access to education for all students, inclusive education has become more important both globally and in Ecuador (Galeas, 2024). In this country, this educational approach has been consolidated as a fundamental element to ensure that each person, regardless of their abilities, gender, ethnic origin, or socioeconomic situation, can access quality education (Argandoña et al., 2024).

Teacher training

Training is a planned and continuous process whose objective is to improve people's competencies, knowledge, skills and attitudes for effective performance in their functions. According to Chiavenato (2009), "training is the process of developing skills, modifying attitudes and increasing people's knowledge so that they perform their tasks more effectively". From the above, it can be deduced that training is a process of improving skills and knowledge for better work performance in educational institutions.

Teacher training is crucial for the effective implementation of gamification, especially in inclusive contexts. The literature on this topic suggests that a significant barrier to the successful use of gamification is the lack of preparation of teachers in the use of technological tools and innovative pedagogical methods (Cabrera-Amaiquema, 2022). Without adequate training, teachers may find it difficult to adapt gamification to the needs of students with intellectual disabilities, which limits its effectiveness (Bravo et al., 2024). Recent research has shown that teacher training is critical for teachers to acquire skills in designing play-based learning activities, which in turn improves student motivation and engagement (Education Sciences, 2022).

In the field of education, digital applications have stood out as innovative pedagogical tools that incorporate game elements such as rewards, levels, and challenges in "non-playful contexts to improve student motivation and engagement" (Mendoza et al., 2024).

This study focuses on the current state of inclusive education in Ecuador, analyzing the emerging trends and future perspectives that influence this approach. In recent decades, Ecuador has implemented significant changes in its educational policies to guarantee the inclusion of students with functional, cultural, and social diversity in the education system.

It is evident that there is a need to train teachers in the use of Genial.ly and other digital tools that can enhance the teaching-learning process and adapt it to the particularities of these students, to ensure the quality of teaching that students with intellectual disabilities receive, since traditional methodologies do not always respond to their specific needs.

Inclusion not only implies adapting the educational environment to meet individual needs but also promoting participation and respect for diversity (López & García, 2024). This context highlights the need to take an in-depth look at current trends in inclusive education implementation, identify remaining challenges, and explore new perspectives to guide progress towards a more equitable and accessible education system for all.

Genial.ly as a gamifiable tool in the teaching of Language and Literature for students with intellectual disabilities

Numerous international studies have shown that gamification can facilitate learning, especially in contexts where students face barriers, such as those with intellectual disabilities (Almagro et al., 2021). This research suggests that diversity not only motivates students but can also improve their retention of knowledge and skills, by making the learning process more interactive and engaging.

In Ecuador, however, the application of these strategies in inclusive education is still unattractive. Despite the legal framework that supports inclusive education, many teachers lack adequate training to implement new strategies in their pedagogical practices. This is particularly critical in rural areas and in educational institutions that serve students with specific educational needs, such as the "Provincia de Cotopaxi" Educational Unit. This institution, which serves students in the first year of Technical Baccalaureate, has identified a deficiency in the training of its teachers to adapt their pedagogical methods to the needs of students with intellectual disabilities, thus limiting the potential of these innovative tools.

At the local level, previous research has shown that the lack of specific training in gamification is an obstacle to its effective implementation. For example, studies carried out in other educational units in the region have highlighted those teachers "are often unaware of the technological and methodological tools necessary to integrate productive alternatives into their classes effectively" (Silva et al., 2022, p. 27). In addition, these studies underscore the importance of adapting gamification techniques to the psychopedagogical characteristics of students with intellectual disabilities, an aspect that is often overlooked in traditional teacher training programs.

In this sense, the institution subject to this research is no exception. Despite efforts to promote inclusive education, the lack of training in this area has resulted in an uneven and often ineffective implementation of

these strategies. Teachers, while engaged, often find themselves without the tools and support needed to adapt their classes to the needs of students with intellectual disabilities. This not only affects the quality of education these students receive but also limits their active participation in the educational process, reducing opportunities for them to fully develop their abilities.

Gamification not only enriches the learning of language and communication skills in the subject of Language and Literature, but also encourages the development of soft skills, such as collaboration, problem-solving and critical thinking, by involving students in playful and competitive activities. In addition, it allows continuous monitoring of student progress, offering immediate and personalized feedback, which helps teachers adjust their pedagogical strategies in real time (Molina et al., 2023).

In the "Province of Cotopaxi" Educational Unit, a significant problem has been identified, although the use of digital platforms such as Genial.ly offer valuable tools to make the teaching process more dynamic and inclusive, especially for students with intellectual disabilities, their potential is limited by the lack of training of teaching staff. Teachers face difficulties in effectively using these digital tools, which hinders the creation of learning environments adapted to the needs of these students, who already have challenges in understanding and retaining information.

This reality reflects an urgent need for continuous training in digital skills, aligned with inclusive principles such as those proposed by UNESCO in its ICT Competency Framework for Teachers. Therefore, the study proposes to design a training program that not only teaches teachers to use Genial.ly in the subject of Language and Literature but also allows them to adapt their pedagogical practices to promote motivation and achieve better results in students with intellectual disabilities. With this orientation, it seeks not only to improve the quality of education in the institution, but also to contribute to the development of inclusive education in Ecuador.

This problematic situation leads to the following scientific problem: how to contribute to improving the use of Genial.ly as a gamifiable tool for teaching Language and Literature in the first year of high school in the Educational Unit "Provincia de Cotopaxi"? The objective of this research is to design a teacher training plan to improve the use of Genial.ly as a gamifiable tool in the process of teaching Language and Literature in high school in the educational unit "Provincia de Cotopaxi".

Methodology

The research approach is mixed, combining quantitative and qualitative methods to examine in depth the impact of a teacher training program on the use of Genial.ly in the teaching of Language and Literature for students with intellectual disabilities. This approach makes it possible to combine quantitative and qualitative methods; this methodology defends the idea that quantitative and qualitative methods are compatible and can be used to obtain information related to the object of study. It involves a systematic and critical process to collect, analyze, combine, and discuss both quantitative (numbers) and qualitative (descriptions) data, in order to better understand the phenomenon being studied (Folgueiras, 2020)

The goal is not to replace one of these methods with the other, but to build on the strengths and learn from the weaknesses of both approaches. A cross-sectional and field design is used, collecting data during an

academic cycle in the "Provincia de Cotopaxi" Educational Unit. The methodological structure focuses on three main aspects: study design, population and sample, and data collection procedures and instruments.

For the research process, the integration of descriptive analysis tools for the evaluation of both changes in students' academic performance and teachers' skills in the use of interactive digital tools was proposed. The theoretical, empirical, and statistical methods applied are aligned with the objective of analyzing the effects of teacher training on the use of Genial.ly and its influence on inclusive learning, based on the theory of Pérez, Ortega, & Araque, (2017) which indicates that like theoretical methods, empirical methods must complement each other, therefore, it is advisable to develop a matrix of methods and instruments against indicators to evaluate each indicator in different ways. This allows us to contrast the data obtained from different sources and even to make new inquiries in the event of contradictions. This approach was chosen to obtain a comprehensive understanding of the teaching-learning process in an inclusive context, allowing students to evaluate both teachers' perceptions and the measurable impact on student performance.

It was necessary to apply the interview method through a questionnaire. A matrix with three dimensions and seven indicators was used for its design, resulting in an instrument with seven questions or items as detailed below in Table 1. These dimensions and indicators were determined from the bibliographic analysis carried out, as well as the experience of the authors.

Table 1
Dimensions and indicators

Dimension 1: Cognitive
1. Define Genial.ly as a gamifiable tool 2. Identifies Genial.ly as a tool that allows gamification of activities in the teaching-learning process of Language and Literature 3. Knowledge of intellectual disability
Dimension 2: Procedural
1. Plan and design gamified activities with the use of Genial.ly as a gamification tool taking into account individualized curricular adaptations 2. Use methodological strategies for learning and evaluation with the use of Genial.ly
Dimension 3: Attitudinal
1. Willingness to remove barriers that limit learning and participation. 2. Recognition of the possibilities for learning with support and adaptations with the use of Genial.ly as a gamification tool

Note: Own elaboration
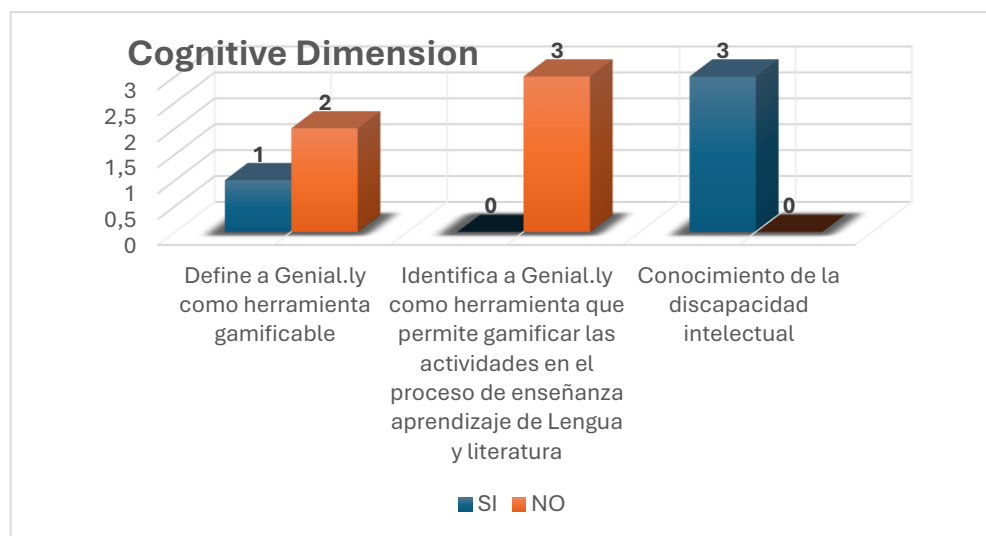
Population and Sample

The study population is made up of 3 teachers and 10 students with intellectual disabilities in the first year of Technical Baccalaureate in the "Province of Cotopaxi" Educational Unit. As the population is small, it is assumed to be a sample. The three teachers have MSc in Language and Literature, two of them with twenty years of experience and one with ten years. The sample is made up of 10 students with intellectual disabilities, who represent a group characterized by the need for adaptive and personalized pedagogical methods based on a complete and validated sample. This sample was chosen to evaluate the use of Genial.ly in the classes they receive in Language and Literature.

Results

After the application of the interview to teachers, the following results were obtained.

Figure 1.
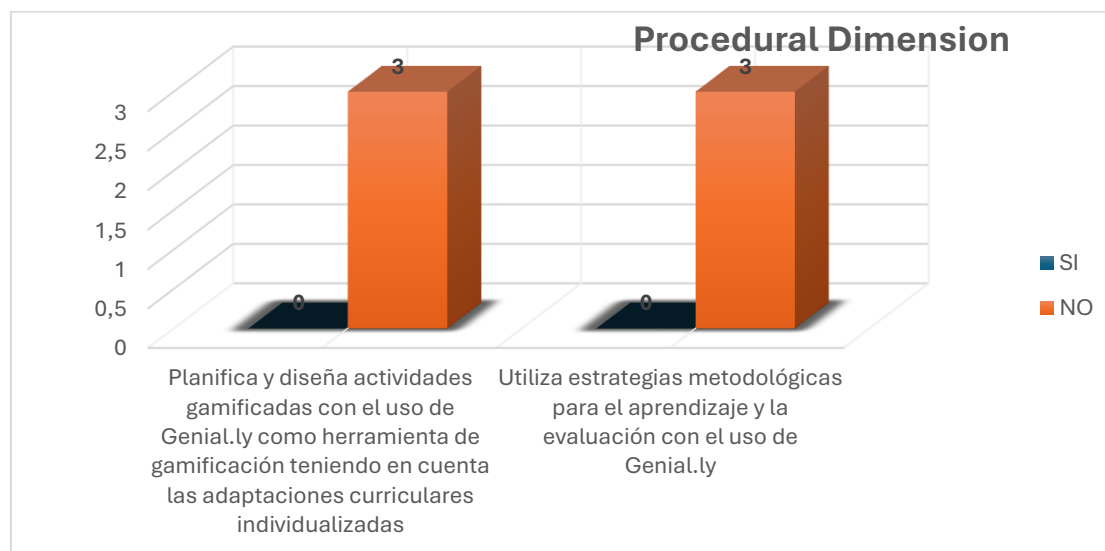
Results of the cognitive dimension interview

Note: Own elaboration

Figure 1 shows that most teachers still face challenges in defining Genial.ly as a gamifiable tool, suggesting the need to strengthen the understanding of this tool on its educational use. However, it is good to see that all participants recognize the importance of knowledge about intellectual disability, highlighting their commitment to inclusion. In summary, this result underlines that, although there are areas for improvement in the application of technological tools, there is a solid foundation of sensitivity and understanding towards the needs of students, which represents a fundamental step towards a more inclusive and adapted education.

Figure 2.

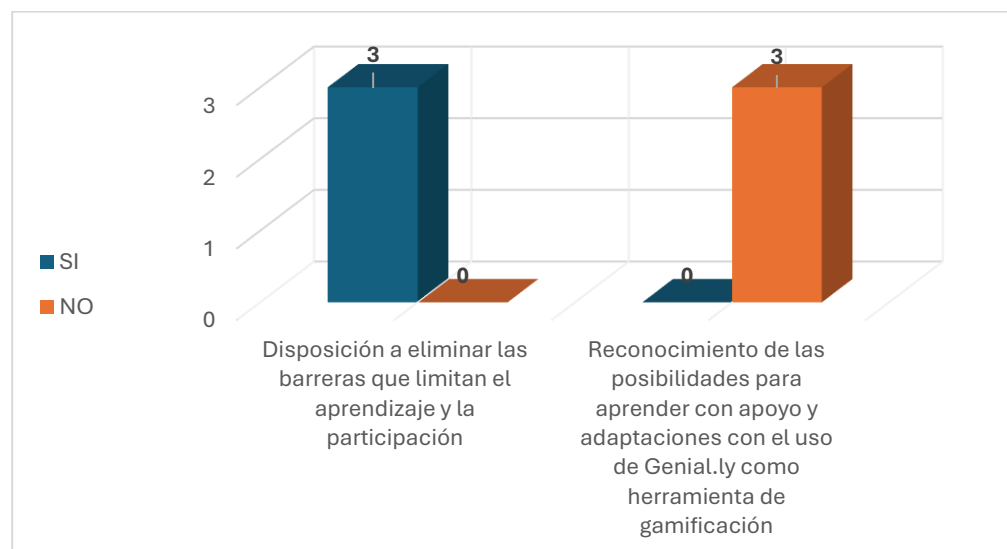*Results of the procedural dimension interview*

Note: Own elaboration

Figure 2 shows the procedural dimension, which indicates the use of Genial.ly as a tool in the planning of activities and methodological strategies in the area of Language and Literature for students with intellectual disabilities. The results showed that 100% of the participants do not plan or design gamified activities using this tool, they do not incorporate methodological learning and evaluation strategies. This indicates a large gap in its practical application.

Figure 3

Results of the attitudinal dimension interview

Note: Own elaboration

Figure 3 reflects a positive attitude on the part of teachers towards the elimination of barriers that hinder learning and participation, demonstrating a clear commitment to educational inclusion. However, there is still a lack of recognition about the potential that Genial.ly offers to support learning through adaptations and gamification.

The analysis of the results of the interview on the use of Genially in the teaching of Language and Literature to students with intellectual disabilities reveals important limitations in terms of the knowledge and application of the tool by teachers, they are unaware of its personalized functionalities, which restricts its integration in the classroom. Although some use it occasionally to plan activities, most do not use it on a regular basis, affecting the active participation of the student body. In addition, a scarce use of interactive resources and the lack of adequate evaluation strategies to measure the impact on learning were identified.

These results highlight the need for teacher training, as a significant gap has been identified in the knowledge and application of this digital tool. Although most teachers recognize the usefulness of Genially for creating interactive presentations, there is a notable lack of knowledge about its other functionalities, such as the creation of interactive games and the use of personalized functions. This limits Genially's potential as a versatile pedagogical tool, relegating its use to simpler and less effective applications in the classroom.

Although teachers are willing to create more accessible environments, they still do not fully identify technological tools as allies in this process. This contrast suggests the need to continue strengthening training,

not only in the technical use of Genial.ly, but also in its practical application as a resource for the inclusion and personalization of learning.

Lack of time and limited access to technology are additional obstacles that hinder the integration of Genially into the teaching of Language and Literature. However, resistance to change is not a relevant factor in this context, suggesting that adequate training and resources are crucial to facilitating wider adoption. According to previous studies, such as those by Ponce and Ochoa (2021), it has been shown that interactive tools such as Genially can improve academic performance by encouraging more dynamic and visual learning. The literature also supports the idea that teacher training is critical to the successful implementation of educational technologies (Attard, 2015; Goehle & Wagaman, 2016).

In addition, it is important to emphasize that, although there is an international consensus on the effectiveness of digital tools in the classroom, in the Ecuadorian context there is a lack of specific research that evaluates the impact of Genially on the teaching of Language and Literature and on the care of students with intellectual disabilities using this tool. This knowledge gap is concerning, as it limits the ability of educational institutions to make the most of these technologies. It becomes clear that in order for Genially to be used effectively, a systematic approach to teacher training is needed, which not only increases digital competencies, but also encourages the creation of personalized and student-centered pedagogical strategies.

Therefore, designing a comprehensive training plan that includes training in the various functionalities of Genially and in the integration of digital resources in teaching can be key to modernizing educational practice in the "Provincia de Cotopaxi" Educational Unit." This would not only benefit teachers in their professional development but could also have a positive impact on the care of students with intellectual disabilities, by providing them with more engaging, interactive and personal learning, in correspondence with their needs.

The results show the need for teacher training for the use of Genial.ly as a gamificable tool in the teaching of Language and Literature for students with intellectual disabilities. The training plan proposed in Table 2 is presented below.

Table 2
Teacher training plan for the use of Genial.ly as a gamifiable tool in the teaching of Language and Literature for students with intellectual disabilities.

At the end of the course, teachers will be able to: Design and implement gamifiable activities using Genial.ly to improve the learning of Language and Literature in students with intellectual disabilities.
Duration: The training is designed for 40 academic hours, distributed in modules focused on strengthening the technical knowledge of the Genial.ly platform and its pedagogical application in the inclusive context of Language and Literature.
RA1: Understand the functions of Genial.ly and its potential as a gamifiable tool to create interactive and accessible learning environments.
RA2: Develop gamification strategies in Language and Literature, adapting activities for students with intellectual disabilities.

RA3: Evaluate the effectiveness of gamified activities in terms of student learning, motivation and participation.

Learning outcomes by modules	Module Detail
Navigate Genial.ly, recognize basic gamification tools, and adapt interactive activities.	Module 1: Introduction to Genial.ly and Educational Gamification Objective: To familiarize teachers with the Genial.ly platform and the basic concepts of gamification in the inclusive educational context. Content: 1.1 Introduction to the Genial.ly interface and its tools. 1.2 Principles of gamification and its application in learning. 1.3 Examples of gamified activities and their adaptation for students with intellectual disabilities.
Design and personalise activities in Genial.ly adapted to the level and needs of students with intellectual disabilities.	Module 2: Design of Gamified Activities in Language and Literature Objective: To train teachers in the creation of interactive activities that promote the learning of Language and Literature. Content: 2.1 Creation of visual and interactive activities in Genial.ly. 2.2 Adaptation of Language and Literature content for students with intellectual disabilities. 2.3 Techniques for integrating game elements (points, levels, rewards) into pedagogical activities.
Evaluate activities in Genial.ly and provide effective feedback to students with intellectual disabilities.	Module 3: Evaluation and Feedback Strategies Objective: To teach teachers to conduct a formative assessment of gamified activities and to provide adapted feedback. Content: 3.1 Evaluation and monitoring tools in Genial.ly. 3.2 Techniques for assessing comprehension and participation in gamified activities. 3.3 Inclusive feedback strategies to improve learning and motivation.
Implement Genial.ly in Language Arts classes, designing lessons that foster inclusion and adaptive learning	Module 4: Implementing Genial.ly in the Inclusive Classroom Objective: To guide teachers in the practical implementation of Genial.ly as a gamifiable learning tool to encourage active and adaptive participation in the classroom. Content: 4.1 Preparation and planning of class sessions with Genial.ly. 4.2 Strategies to motivate students with interactive activities. 4.3 Adaptation of Genial.ly to different levels of ability within an inclusive classroom.
Demonstrate mastery of Genial.ly and reflect on their experience,	Module 5: Final Evaluation and Reflection on the Training Experience

generating an action plan for future applications.	Objective: To evaluate the knowledge acquired by teachers and reflect on the challenges and opportunities of gamification in inclusive education. Content: 5.1 Evaluation of the knowledge acquired during the training. 5.2 Analysis of cases and reflection on the application experience. 5.3 Planning for future implementations and adaptations of gamification.

The structure of the proposed teacher training plan adequately allows the approach of the modules, for the achievement of knowledge and digital skills in the Genial.ly tool by the teachers of Language and Literature of the Educational Unit "Province of Cotopaxi". It is expected that at the end of the year, teachers will have the ability to apply projects to create educational resources in Genial.ly, which will allow them to improve attention with the adaptations required by students with intellectual disabilities, promoting adaptive learning and inclusion.

Proposal validation

The proposal of the teacher training plan for the use of Genial.ly as a gamifiable tool in the teaching of Language and Literature for students with intellectual disabilities, is hosted at the following link.

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https://view.genially.com/67ba78dd07fa8a664afdefcc/learning-experience-didactic-unit-capacitacion-docente-para-el-uso-de-genially-como-herramienta-gamificable-en-la-ensenanza-de-lengua-y-literatura-para-estudiantes-con-discapacidad-intelectual
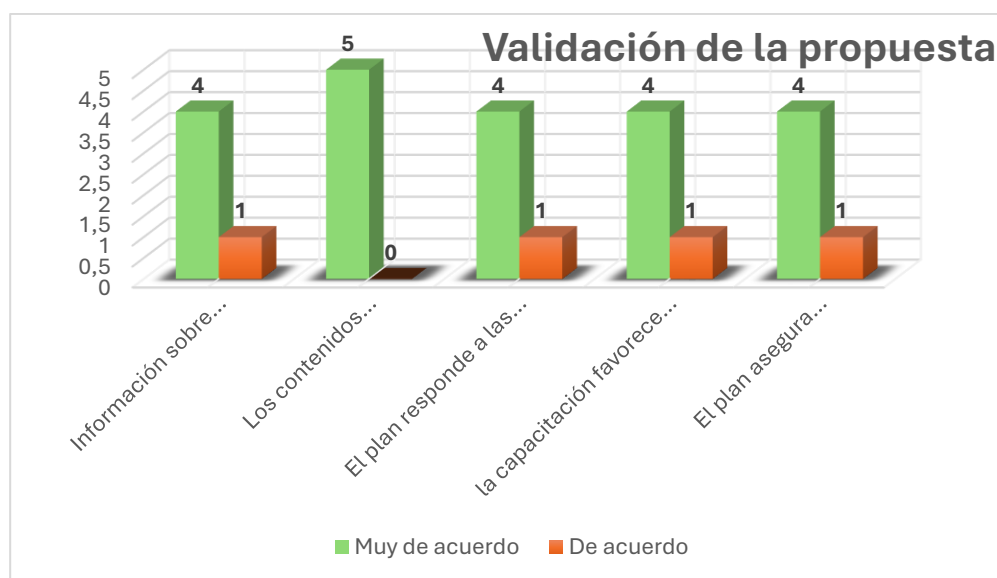
The validation of the proposal was carried out by specialists, a survey was conducted with five specialists, all of them tenured professors with master's degrees and four with more than 10 years of experience as teachers around Language and Literature.

The results show that all five specialists affirm that the training proposal is valid. Not only has this tool been easy for them to understand, but it has also sparked their interest in classroom practice in a creative way.

In addition, they state that the proposed training plan combines theory with practical activities. The contents are in correspondence with the identified needs, favors the development of digital skills in teachers and prepares them for personalized attention to students with intellectual disabilities, which favors the teaching-learning process to be dynamic, generating interaction and participation of students.
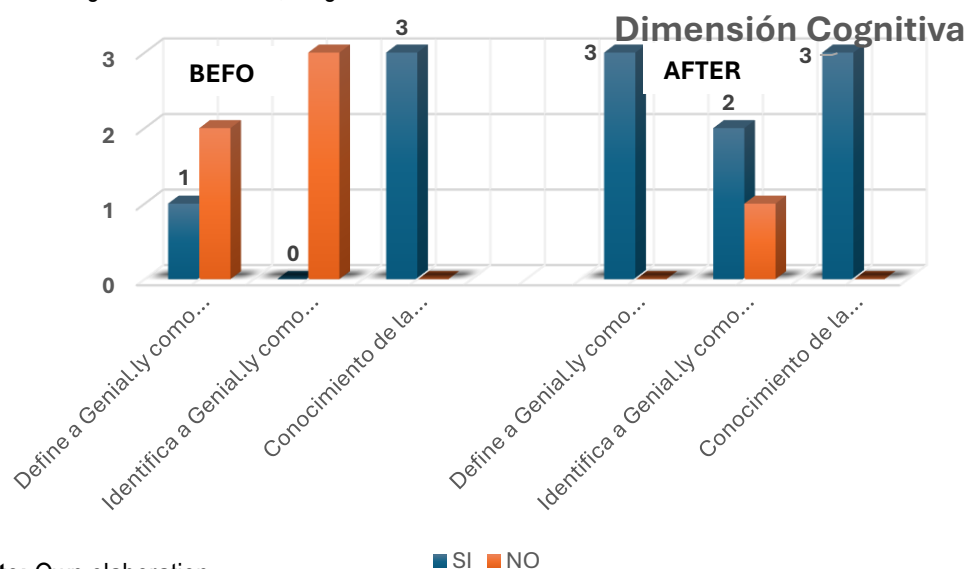
The results can be seen at the following link https://docs.google.com/forms/d/15IIJX-8KeRX12IxI7n8mPMxbN4RygGh2dsv5eflpzq8/edit

Figure 4.

Results of the survey of specialists

Validación de la propuesta

Muy de acuerdo · De acuerdo

Note: Own elaboration

After consulting specialists, the training plan was implemented in the use of Genial.ly as a gamifiable tool, and a post-training interview was conducted with the teachers. The results are shown below:

Figure 5.

Post-training interview results, Cognitive Dimension.
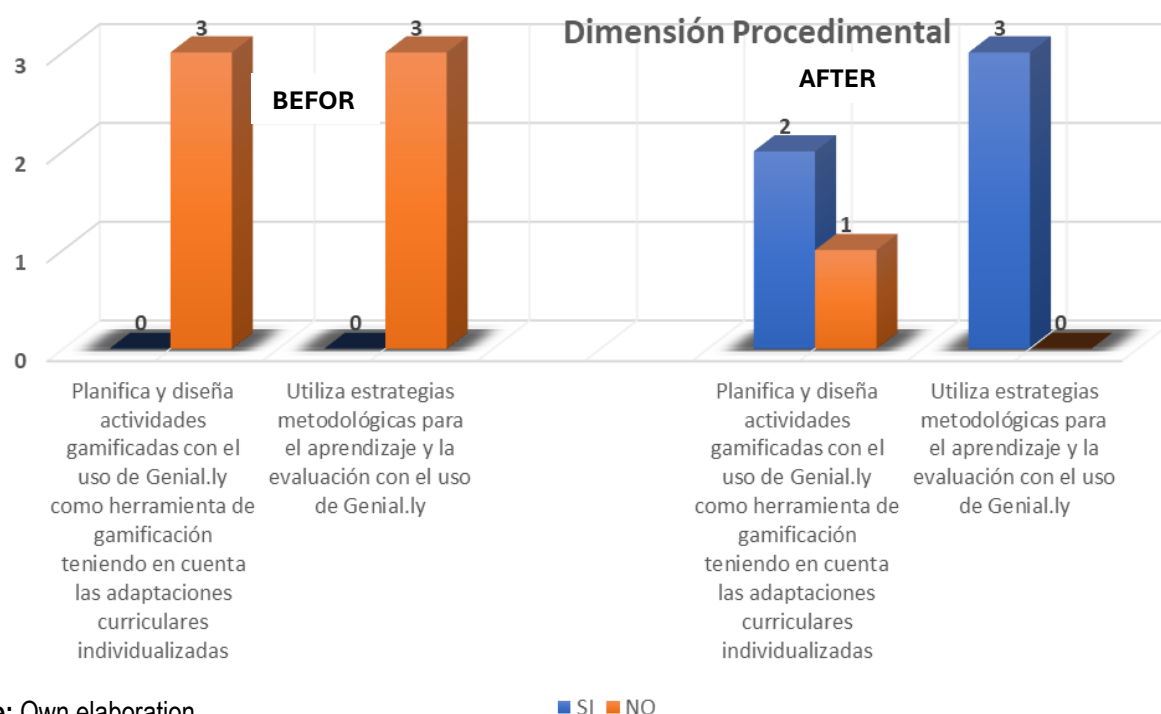

Dimensión Cognitiva

SI · NO

Note: Own elaboration

Figure 5 represents the Cognitive Dimension, showing a comparison of the knowledge before and after teacher training and the use of Genial.ly as a gamifiable tool in the teaching of Language and Literature for students with intellectual disabilities.

As we can see, before the training only one teacher had a basic notion of what Genial.ly is, and none of them was able to identify the useful tool for teaching. After the training the 3 teachers were able to correctly define Genial.ly and understand its educational purpose. Knowledge about the tool increased significantly, going from no teacher with prior knowledge to the three participants trained in its use.

Figure 6.
Post-Training Interview Results, Procedural Dimension
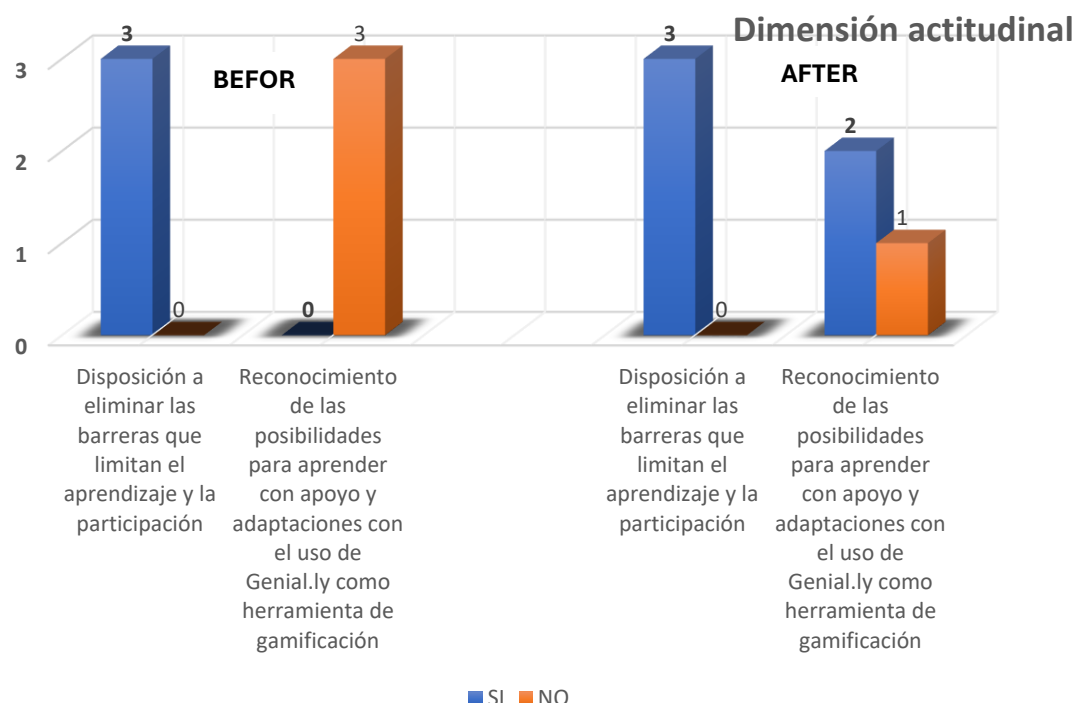

Note: Own elaboration

Figure 6 shows the comparison of the levels of application of methodological strategies before and after the teacher training plan. Before the training, no teacher planned or designed gamified activities with Genial.ly, then two teachers began to plan and design gamified activities with the tool, although one still has difficulties in its application.

We can observe that previously there was a total absence of the practical application of this tool in the classroom, which indicated ignorance or lack of training in the use of digital resources for inclusive teaching, after training in the use of Genial.ly as a gamifiable tool in the teaching of Language and Literature for students with intellectual disabilities. generated a positive change, as it facilitated the incorporation of digital tools in teaching adapted to the needs of students with intellectual disabilities.

Figure 7.
Post-training interview results, Attitudinal Dimension.

Note: Own elaboration

We can see Figure 7 of the Attitudinal Dimension the before and after the training. Before the training, Genial.ly was not identified as a tool to carry out activities in the classroom, now most consider that Genial.ly does contribute to the improvement of motivation and learning, knowing that the activities in the tool can also be adapted according to the individual needs of the students. All teachers are willing to apply what they have learned in the training plan for the use of Genial.ly in the classroom and encourage student participation in the different activities carried out with the gamifiable tool.

Discussion

The education of students with intellectual disabilities requires strategies focused on the better understanding of the knowledge taught, Cortez-Clavijo, González-Zambrano, & Chiriguay-Villagómez, (2020) mentions that learning activities must be adapted to their abilities and special educational needs. This can include simplifying content, repeating concepts, and using visual and auditory support.

Additionally, in research such as that of Chiluisa et al., (2024) they mention that the training plan helps mitigate the digital divide that exists in the educational field, especially with students with educational needs. On the other hand, García-Tudela et al., (2022) stress that it is currently necessary for teachers to have knowledge

of educational tools, especially gamifiable ones, to be able to use them in the teaching-learning process, in this case in the subject of Language and Literature.

The application of gamification in the teaching of Language and Literature generates positive results, evidencing the increase in formative learning (Gurumendi-Alvarado et al., 2022). Integrating the use of the Genial.ly tool in Language and Literature classes can make a significant difference in the learning process of students with intellectual disabilities. By transforming content into interactive and dynamic experiences, not only is their attention better captured, but it also creates an environment where learning becomes a more fun experience and closer to their interests. However, for this to happen, it is necessary for teachers to play an active role, guiding and accompanying students in the use of this platform. In this way, Genial.ly becomes a bridge between traditional teaching and adapted learning. Based on the above, we can affirm that continuous teacher training is essential to mitigate any digital divide, especially when it comes to gamification in the classroom.

Conclusions

The research reflected the lack of theoretical and practical knowledge of the use of Genial.ly as a gamifiable tool for the care of students with intellectual disabilities in Language and Literature classes among the teachers analyzed, which underlined the need for teacher training. The proposal for a training plan emerged as an essential conclusion.

The training plan presented addressed the dimensions and indicators studied, from theory and practice, as a contribution to mitigate the existing gap and improve the inclusive education of students with intellectual disabilities. The proposal was validated by specialists and later implemented.

The teacher training plan not only facilitates the development of technical skills but also boosts teachers' confidence in their ability to tailor educational activities to students' specific needs. This approach shows that continuous training focused on the adaptation of digital resources can increase the effectiveness of inclusive education.

The results of the training show the preparation acquired by teachers for the use of Genial.ly, promoting inclusive and accessible education, promoting equality and respect, favoring attractive learning environments for students with intellectual disabilities in the subject Language and Literature of the first year of Technical Baccalaureate in the Educational Unit "Province of Cotopaxi".

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