



REDEFINING TEACHER IDENTITY IN THE ERA OF GENERATIVE ARTIFICIAL INTELLIGENCE Perceptions, Resistance and Opportunities in Contemporary Education

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KEYWORDS	ABSTRACT
<i>Generative intelligence artificial Pedagogical transformation Educational innovation Digital competences Educational technology</i>	<i>This study examines teachers' perceptions of the integration of generative artificial intelligence (GenAI) into education and its influence on the redefinition of their professional identity. Survey data from 328 teachers working across different educational stages were analysed to assess their perspectives, patterns of use, technological competences and the main challenges encountered in implementing GenAI. The findings indicate a generally positive perception of GenAI; however, levels of adoption vary considerably and are influenced by factors such as technological adaptability, access to training and ethical concerns.</i>

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1. Introduction

The rapid growth of generative artificial intelligence (GenAI) in recent years is redefining contemporary education systems, with implications across all stages of education, from early childhood education to primary education. Within this context of change, GenAI is reshaping contemporary pedagogy while raising important questions about the role of teachers in teaching and learning processes, since its integration into the classroom entails a reconfiguration of teachers' work and professional identity. Throughout history, every transformation in education systems has involved significant changes in the relationship between teachers and students (Carless, 2007; Rivas, 2014). However, the emergence of this new technology represents a particularly profound transformation, as it not only introduces new tools but also redefines teaching methodologies and the role played by teachers within the educational process.

This transformation generates tensions and differing perceptions among educators. On the one hand, some recognise the potential of GenAI to enrich teaching in multiple ways, while, on the other, others express concern about its impact on assessment, the authenticity of learning and the redefinition of the competences required for teaching practice in highly changeable and constantly evolving environments (Chen et al., 2020; Mulyani, 2025).

Given these contrasting positions, the integration of GenAI cannot be understood solely as a technological change, but rather as a reconfiguration of educational dynamics and teacher identity, since it highlights the need to reconsider the teacher's role not merely as a transmitter of knowledge, but as a facilitator or critical mediator capable of designing learning experiences and collaborating in environments in which humans and intelligent systems coexist and interact naturally (Bennett & Royce, 2026; Bower et al., 2024).

2. Background and Brief State of the Art

The literature published on the subject portrays teachers as positioned between two poles: optimism and uncertainty. Although most studies recognise the pedagogical potential of GenAI (Akanzire et al., 2025; Alwaqdani, 2024; Haroud and Saqri, 2025; Mulyani, 2025; Zhai, 2024), they also concur in highlighting the tensions it generates regarding what it means to be a teacher and how this transformation affects contemporary pedagogy (Conde-Carmona & Padilla-Escorcía, 2025; Dúo-Terrón et al., 2023; Morán-Ortega et al., 2024; Nungaray et al., 2025).

Most teachers perceive GenAI as a new tool capable of automatically generating resources, creating more inclusive or interactive educational environments, producing personalised materials and adapting them to students' educational needs within a short period of time. Nevertheless, despite its recognised potential, not all teachers have progressed from recognising its value to using it regularly (Maphoto et al., 2024; Petrucco et al., 2025).

Some studies argue that GenAI is generating crises of professional confidence among teachers because their traditional competences, such as transmitting knowledge or designing assessments, are being eroded. This generates anxiety and uncertainty regarding the role they will play in the future (Isma'il & Ibrahim, 2025; Lan, 2024; Zhou, 2024). Likewise, the lack of transparency or opacity of the algorithms used in education has been identified as a barrier that limits their use, since it makes it more difficult for teachers to understand how decisions are made (Alufaisan et al., 2021; Janssen et al., 2020).

The most pervasive concerns across the literature are academic integrity and privacy (Carmody et al., 2021; Taitingfong, 2020). Both the fear of plagiarism and misuse by students recur throughout the studies, as does the possibility that GenAI may restrict creativity, critical thinking and teachers' work (Al-Zahrani, 2024; Anantrasirichai & Bull, 2021; Guan et al., 2020; Halina, 2021; Sehar, 2024; Yang & Appleget, 2024).

A more critical strand of research raises concerns about dehumanisation or the loss of the human dimension. Some authors suggest that greater use of GenAI may lead to a loss of connection between teachers and students, which could affect students' motivation, academic performance, social and academic development, and overall educational experience (Dong et al., 2020; Fügenger et al., 2021; Natale, 2021; Ryan, 2020; Shneiderman, 2020). Conversely, the studies by Lan (2024) and Ghimire (2024) show that teachers who regularly use GenAI in their daily practice tend to hold more favourable

attitudes towards it. In other words, frequency of use correlates positively with viewing AI as a tool or complement rather than as a threat.

The ethical dimension has also attracted particular interest. Farisco et al. (2020), Mökander and Floridi (2021), Owe and Baum (2021), and Stahl et al. (2022) argue that the ethical implications of implementing GenAI in the classroom need to be examined carefully. Factors such as informed consent, data ownership and other possible legal consequences must be addressed through legislation.

A lack of training and resources constitutes two further barriers limiting the adoption of this technology (Barros, 2023; Castillo, 2023; Castillo & Beltrán, 2024; Molina et al., 2024; Serrano & Moreno-García, 2024; Van den Berg & Du Plessis, 2023). The successful implementation of GenAI in education requires teachers to adopt new pedagogical practices and develop new technological skills for which they often feel unprepared (Timmi & Benaoui, 2026). In this regard, inadequate training may hinder both its effective application and teachers' confidence in using it appropriately (Chiu et al., 2022; Chounta et al., 2021).

From a sociological perspective, Liu and Li (2022, p. 34) argue that the redefinition of teachers in the era of GenAI should also be approached through professional capital, understood as the "set of competences, relationships and decision-making capacity that distinguishes the teacher from the machine", rather than solely through technological literacy.

In this context, it is necessary to explore in greater depth how teachers interpret and experience the incorporation of GenAI into their daily professional practice. The way teachers conceptualise these technologies shapes not only their degree of adoption, but also how their pedagogical functions, professional competences and identity within the educational process are redefined. Describing and analysing these perceptions will make it possible to determine the extent to which GenAI is contributing to the reconfiguration of the teacher's role in an increasingly digitalised educational environment. Based on this contextualisation, the study seeks to answer the following research questions:

- R.Q.1. How do teachers perceive the impact of GenAI on their professional identity and their role within the educational process?
- R.Q.2. Are there significant differences in the capacity for technological adaptation between teachers who use GenAI and those who do not?
- R.Q.3. Is there a relationship between knowledge of GenAI and perceptions of the transformation of the teacher's role?
- R.Q.4. What are the main concerns perceived by teachers regarding the implementation of GenAI in education?
- R.Q.5. Are there distinct teacher profiles according to the degree of GenAI use? Is there a teacher profile at risk of digital exclusion?

3. Methodology

This research adopts a non-experimental, cross-sectional, descriptive-correlational design. Using a quantitative methodology, it seeks to analyse teachers' perceptions of the impact of GenAI on their educational practice. The study is cross-sectional because the data were collected at a single point in time in order to examine the current state of GenAI adoption in education, as well as how this technology is reconfiguring the role of teachers in contemporary education.

A non-probability convenience sampling method, commonly used in descriptive studies, was employed to select the participants (Hernández et al., 2018). The sample comprised 328 practising teachers from all educational stages. Given the diversity of the participants' profiles in terms of both their knowledge and the educational stages in which they worked, the sample enables perceptions to be analysed across different educational contexts.

Data were collected through a questionnaire created using Google Forms, comprising 21 questions divided into four thematic blocks: teacher profile, pedagogical practice, use of GenAI and perceptions of GenAI. The teacher profile section collected sociodemographic variables such as age, educational stage and subject taught, while the pedagogical practice section included questions related to the use of new methodologies and the pedagogical strategies applied in the classroom. Data collection took place between September 2025 and February 2026.

The block concerning the use of GenAI collected information on patterns and frequency of use, the types of tools used and participants' level of knowledge. Finally, the last block included questions

assessing teachers' capacity to adapt to technological change, their perceptions of the impact of AI on the profession, the associated challenges and the need for training.

The Python programming language (v. 3.10.12) was used for data processing and analysis, given its suitability for machine learning and the analysis of large volumes of data (McKinney, 2017; Pedregosa et al., 2011). Various specialised libraries were also used: Pandas (1.5) for data manipulation, NumPy (1.23) for numerical operations, Matplotlib (3.5) for data visualisation, SciPy (1.9) for statistical and correlational analyses, and scikit-learn (1.2) for cluster analysis.

The statistical analysis was conducted at three levels. First, descriptive statistics were used to calculate frequencies, percentages, means and standard deviations. Second, relationships between variables were analysed using Spearman's rank correlation coefficient, given their ordinal nature. Third, cluster analysis was performed using the K-means algorithm to segment teachers into homogeneous profiles according to their attitudes and competences (Jain, 2010).

4. Objectives

The general objective of this research is to analyse the perceptions, competences and challenges faced by teachers in relation to the integration of GenAI into their educational practice, and to examine how these factors influence the reconfiguration of their professional identity and role within the teaching and learning process.

The following specific objectives are proposed:

S.O.1. To identify the factors associated with the adoption of or resistance to GenAI in the classroom, considering aspects such as technological adaptability, ethical concerns and teachers' training needs.

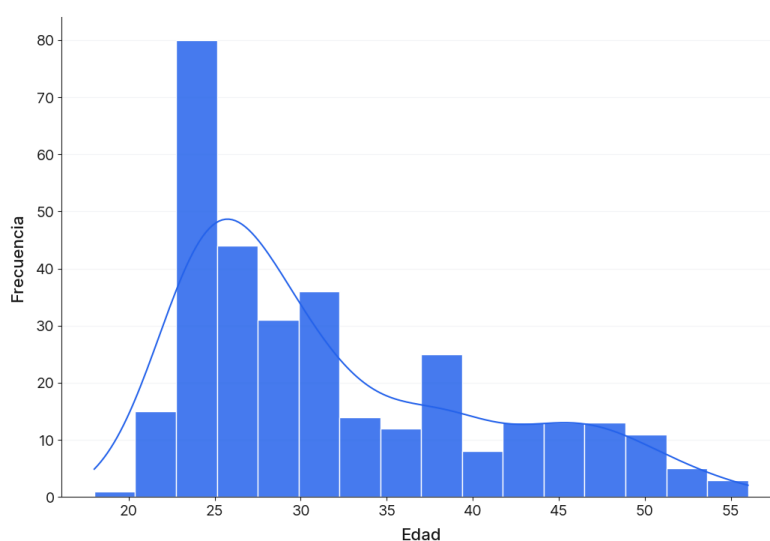
S.O.2. To identify and describe the profile of contemporary teachers according to their frequency of use and level of knowledge of GenAI in teaching practice.

5. Results

First, selected demographic characteristics of the sample are described. Regarding the distribution across educational stages, all stages are represented in a relatively balanced manner. Specifically, 14% of the participants worked in early childhood education, 20% in primary education, 16% in secondary education, 19% in upper secondary education, 8% in vocational education and training, and 23% in higher education, including bachelor's and master's degree programmes.

Regarding age, the mean was 31 years, with a range of 21 to 56 years. As shown in Figure 1, the distribution displays positive skewness, with a slight concentration of younger participants within the sample.

Figure 1. Age distribution of participants

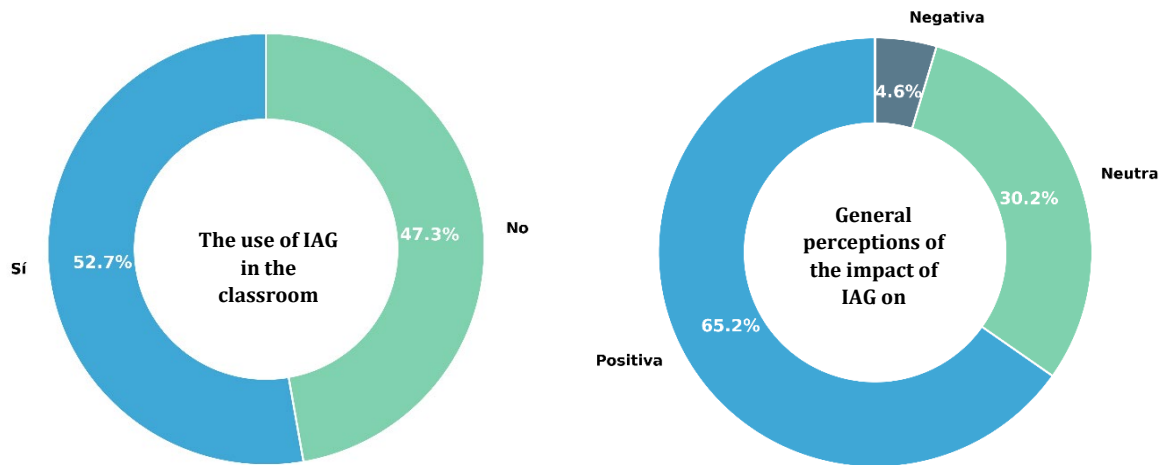


Source: Authors' own elaboration (2026)

The results show that more than half of the teachers use GenAI in the classroom and that overall perceptions of its impact on education are predominantly positive. Figure 2 shows that 65.24% of

teachers consider its impact to be favourable. A further 30.18% expressed a neutral assessment, suggesting that a substantial proportion of teachers hold an intermediate position, while only 4.5% reported a negative perception, indicating limited rejection of this technology. In addition, the most common uses of these tools among teachers who use GenAI were analysed.

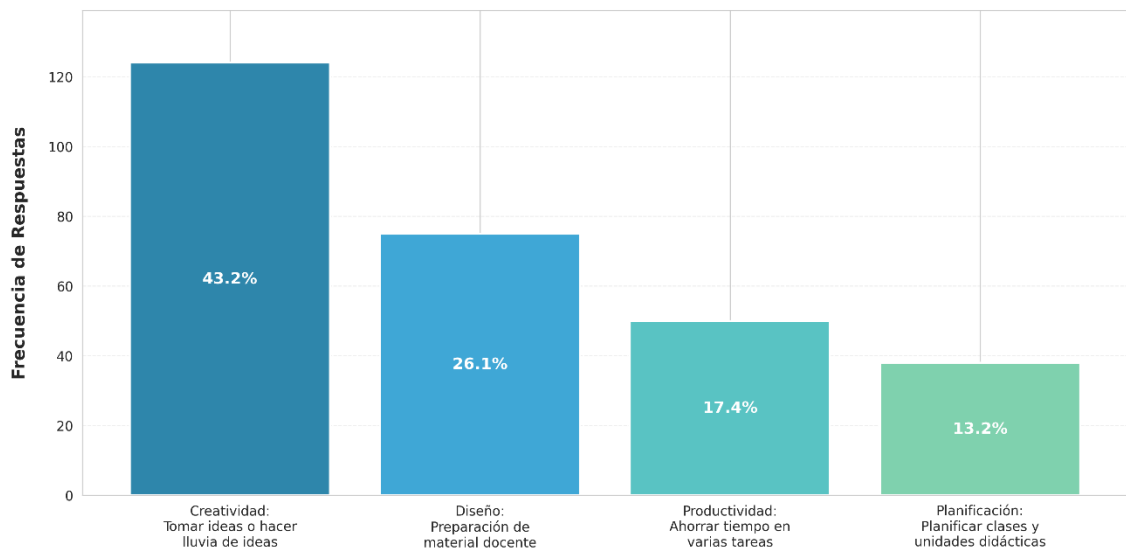
Figure 2. Percentage of teachers who use GenAI and their perception of it



Source Authors' own elaboration (2026)

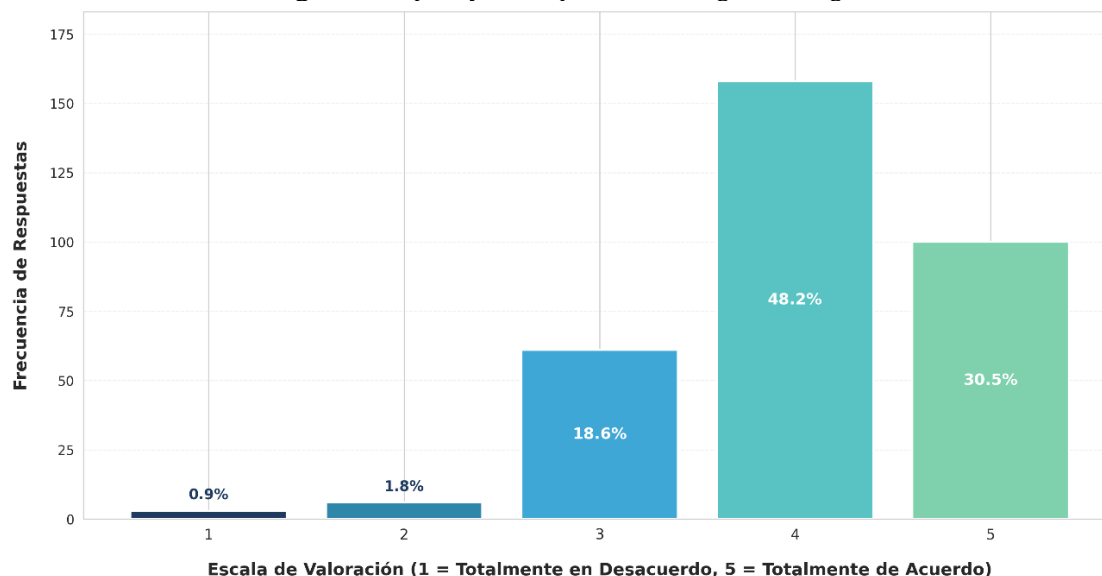
Figure 3 shows that the most frequent use is related to creative processes, namely the generation of ideas or strategies for designing activities, which accounts for 43.2% of cases. The second most common use, reported by 26.1% of teachers, is the design and creation of educational content and teaching materials. A further 17.4% use these tools to enhance teacher productivity, particularly by saving time on various tasks, while 13.2% use them to plan lessons or teaching units.

Figure 3. Uses of Gen AI



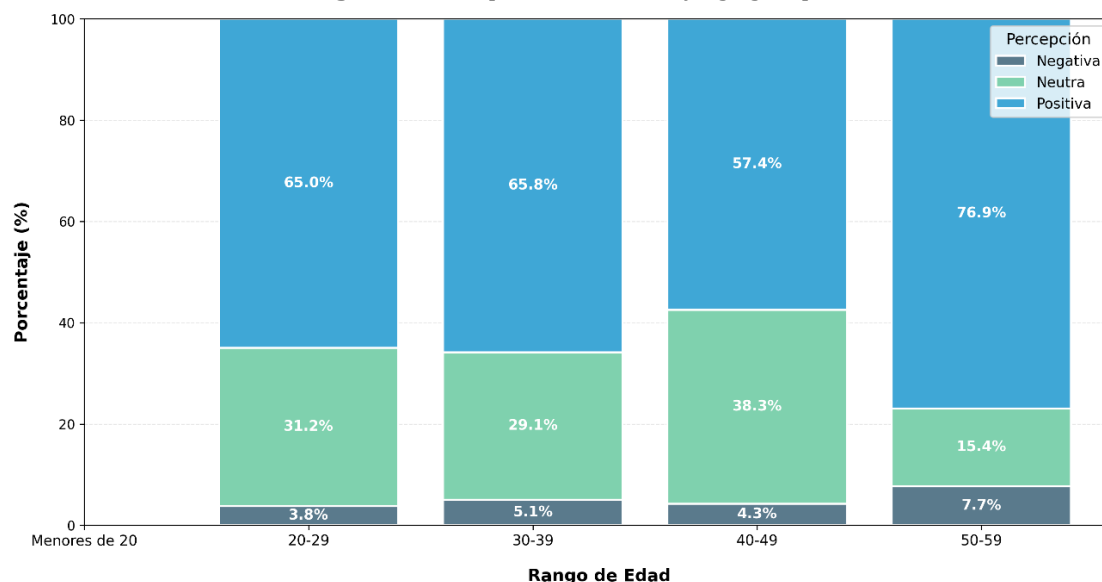
Source: Authors' own elaboration (2026)

To gain a better understanding of teachers' willingness to incorporate new technologies into education, their capacity to adapt to technological change was first analysed. As shown in Figure 4, 80% of teachers perceive themselves as having a strong capacity to adapt.

Figure 4. Capacity to adapt to technological change

Source: Authors' own elaboration (2026)

Contrary to expectations, when perceptions are examined by age group, older teachers emerge as the most optimistic. The 50–59 age group displays the highest proportion of positive perceptions, whereas the 40–49 age group is the most sceptical, with a higher proportion of neutral responses. As shown in Figure 5, negative perceptions are generally low across all age groups. These results challenge age-based assumptions, as well as the idea that age constitutes a barrier to the acceptance of GenAI in education. Nevertheless, there appears to be broad intergenerational consensus, since more than 57% of teachers in every age group hold a positive perception.

Figure 5. Perceptions of GenAI by age group

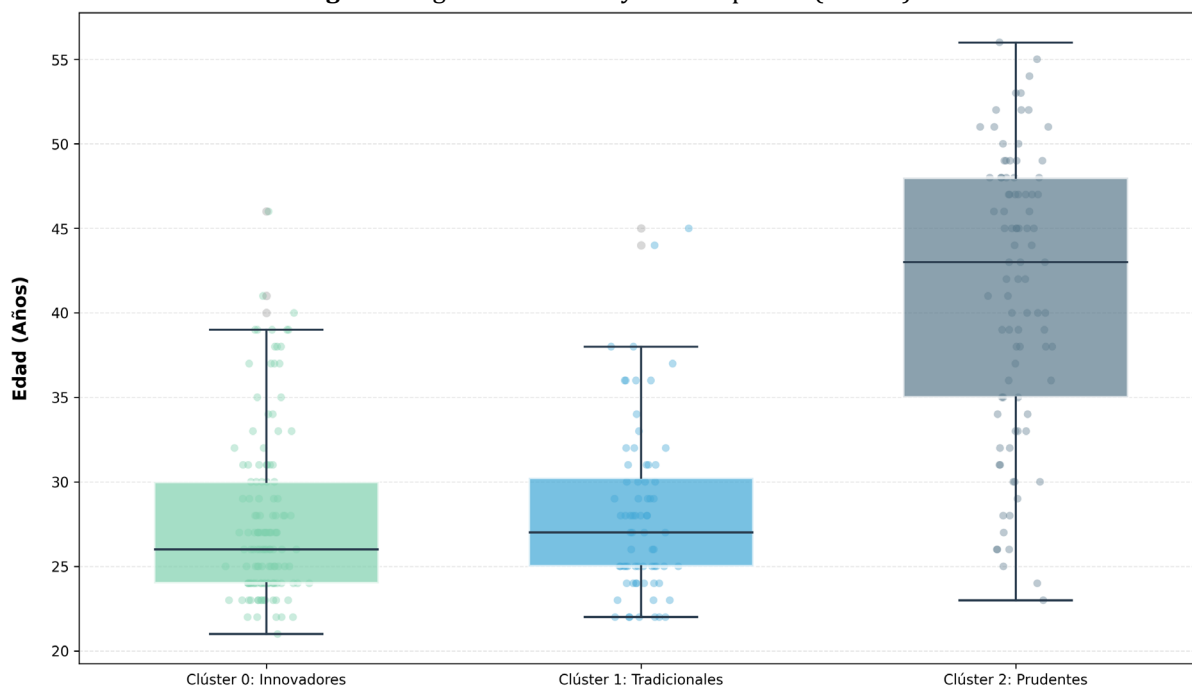
Source: Authors' own elaboration (2026)

Based on these indicators, it is worth considering whether teachers' age may be related to their profile of GenAI adoption in the classroom. To explore possible patterns in how teachers position themselves towards this technology, a cluster analysis was conducted, identifying three distinct profiles according to their attitudes, competences and degree of GenAI use: innovative teachers, traditional teachers and cautious teachers.

These profiles reflect different ways of engaging with technology, ranging from more active adoption to more conservative positions. Taking this classification into account, the age distribution within each

group was analysed in order to identify possible generational differences in GenAI implementation. Figure 6 shows the age dispersion across the profiles identified.

Figure 6. Age distribution by teacher profile (cluster)



Source: Authors' own elaboration (2026)

The innovative teacher cluster comprises those who display a more open attitude towards incorporating GenAI into the classroom. This group reports high levels of GenAI tool use in teaching practice, as well as a greater capacity to adapt to technological change. In attitudinal terms, these teachers view GenAI as an opportunity to improve teaching practice and promote the use of more active, dynamic and personalised methodologies. They tend to experiment with new tools while also using GenAI as a support resource for planning activities, generating content and designing pedagogical strategies.

In demographic terms, this profile comprises the youngest teachers, with a median age in their late twenties.

Traditional teachers, for their part, display a more moderate or neutral attitude towards GenAI. Although they recognise its educational potential, their level of use is lower or more limited, and their teaching practice remains associated with traditional methodologies; that is, most do not use active methodologies. This group values the possibilities offered by GenAI but does not incorporate it systematically into daily practice. Its use is more closely associated with initial stages of exploration or learning. In terms of age, this profile presents a distribution relatively similar to that of the innovative group, although with greater dispersion. This also shows that the adoption of traditional methods does not depend exclusively on generational factors.

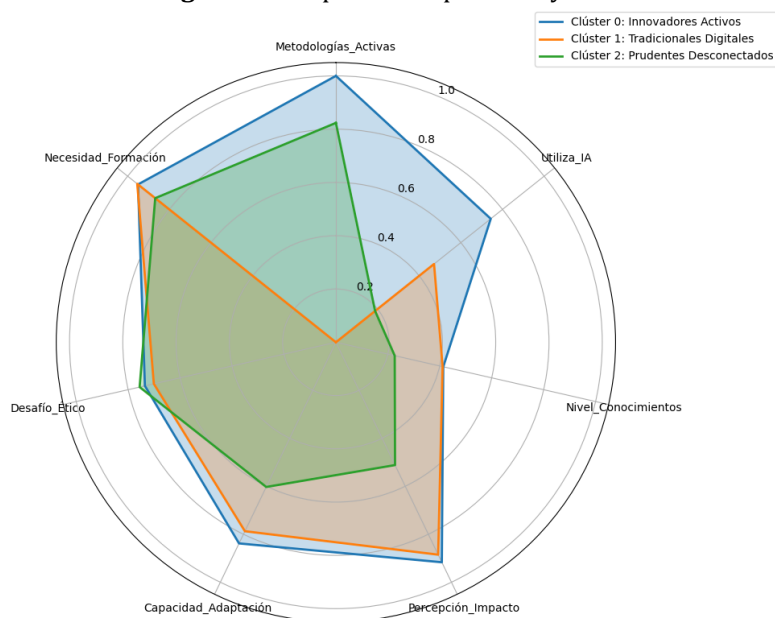
Finally, the cautious teacher cluster comprises those who maintain a more guarded attitude towards incorporating GenAI into education. This group includes teachers with the lowest levels of use and the greatest concern about the ethical and pedagogical challenges associated with its use. However, they do not necessarily hold negative perceptions, but tend to express greater doubts about its educational implications, particularly those related to technological dependence, assessment, the reliability of generated content and its actual impact on learning processes.

As shown in Figure 6, there are differences in the distribution of the three profiles identified. Although positive perceptions predominate in all clusters, the results show that the effective adoption of GenAI is concentrated among the youngest teachers. Nevertheless, they also demonstrate that a favourable attitude towards GenAI does not necessarily translate into its implementation in the classroom. This result appears to be associated with various barriers identified by teachers across all groups, including a lack of training, limited experience in using technological tools, ethical and

professional challenges, and difficulties adapting to the changes arising from the constant transformation of the educational model.

To explore the construction and characterisation of these teacher profiles in greater depth, Figure 7 compares the three clusters on the basis of variables related exclusively to pedagogical practice and teachers' relationship with GenAI, including the use of active methodologies, level of knowledge of GenAI, use in the classroom, perceptions of its impact on education, capacity for technological adaptation, ethical challenges and the need for training.

Figure 7. Comparison of profiles by cluster



Source: Authors' own elaboration (2026)

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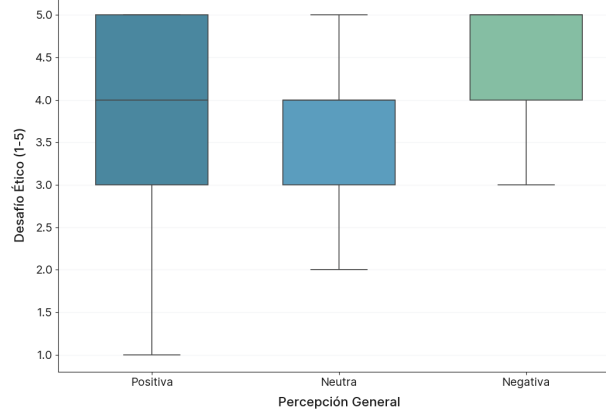
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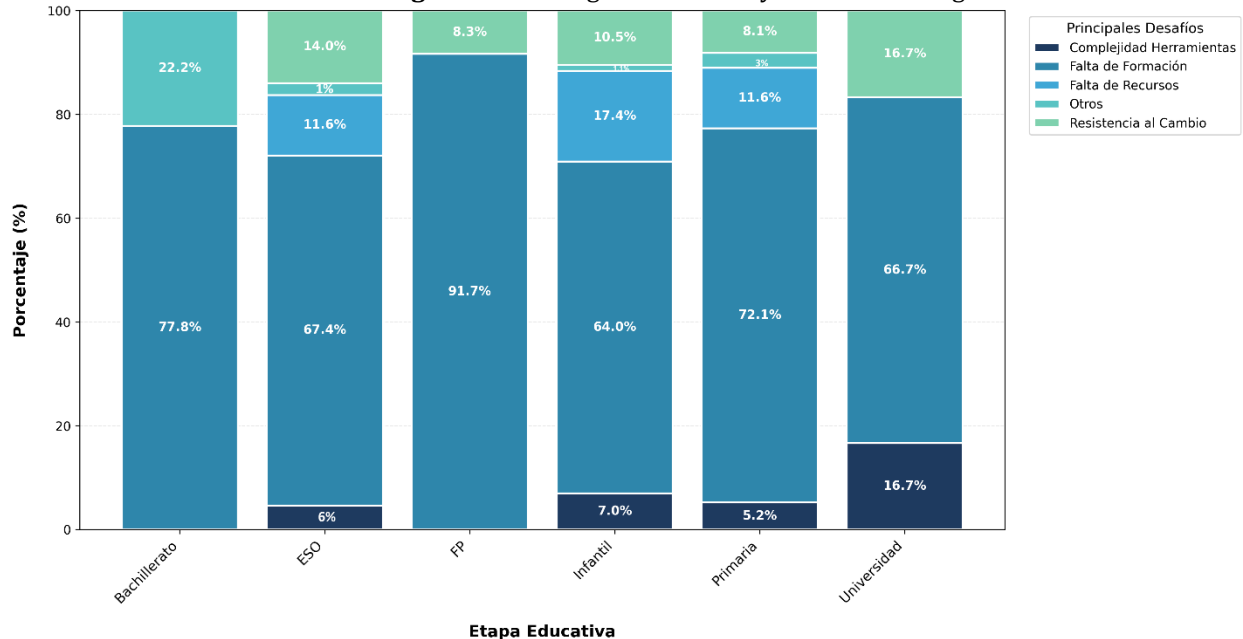
Figure 8. Ethical concerns according to perceptions of the impact of GenAI



Source: Authors' own elaboration (2026)

Figure 9 shows the main challenges identified by teachers according to the educational stages in which they work.

Figure 9. Challenges identified by educational stage



Source: Authors' own elaboration (2026)

A lack of training is the most frequently identified challenge across all educational stages, with percentages ranging from 64% to 92%. As can be seen, it is particularly critical in vocational education and training, followed by upper secondary education, where more than 75% of teachers identify this barrier as the main obstacle to implementing GenAI in their teaching practice. This pattern confirms that the principal barrier lies not in teachers' attitudes, but in their insufficient preparation to integrate GenAI appropriately.

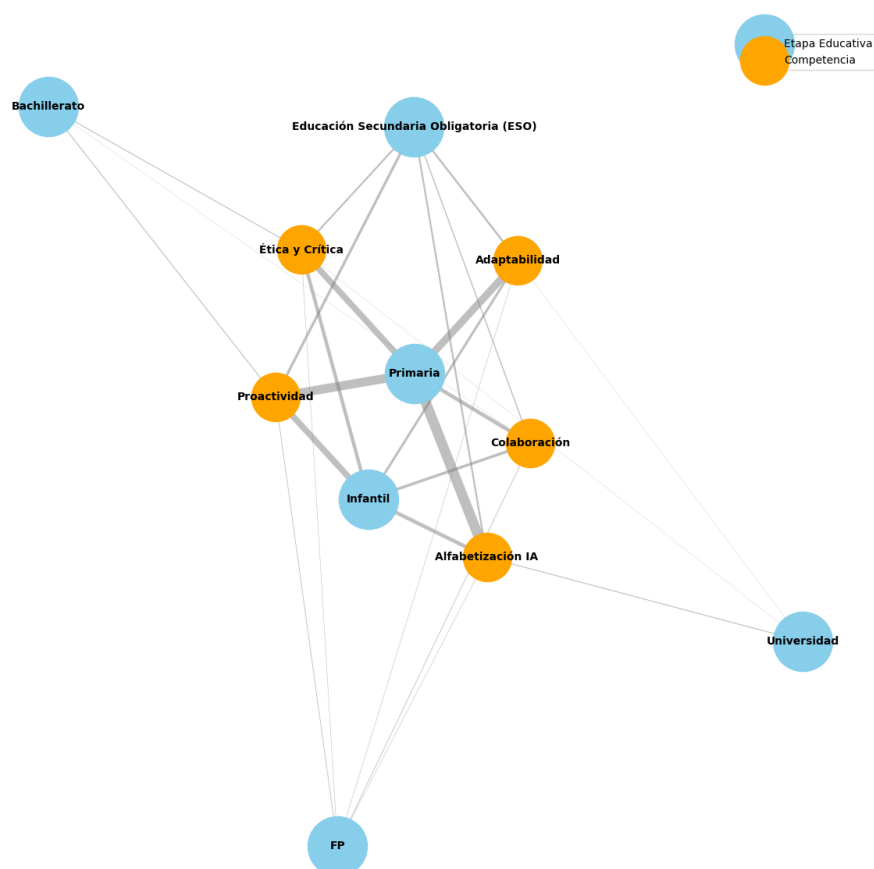
Secondly, a lack of technological resources carries greater weight in early childhood education (17%) and primary education (11.6%). In the classroom, this may be due to the need to adapt technological devices for younger pupils, but also to the lower level of technological provision in these institutions compared with universities or vocational education and training centres.

In addition to a lack of training, university teachers identify resistance to change and the complexity of the tools (16.7%) as other significant barriers. Resistance to change is also notable in compulsory secondary education (14%), exceeding the levels recorded in early childhood and primary education. This finding reinforces the idea that reluctance to incorporate GenAI is more closely associated with the need for training than with direct opposition among teachers to these technologies.

Within this framework, teachers were asked which competences they considered essential for addressing and overcoming these challenges. Figure 10 presents a network map showing the competences identified by educational stage.

Competences such as digital literacy, particularly GenAI literacy, technological adaptability, critical and ethical thinking, collaboration and proactivity are connected to all educational stages. Literacy and adaptability stand out in particular as central nodes within the network, indicating that the development of these competences would be a determining factor in overcoming the barriers identified in Figure 9. This finding confirms that the integration of GenAI into education also depends on the development of professional competences that enable teachers to understand, use and evaluate these tools critically and in a pedagogically meaningful manner.

Figure 10. Essential competences in contemporary education



Source: Authors' own elaboration (2026)

To examine the relationships between these variables in greater depth, a correlational analysis was conducted using Spearman's rho coefficient, as the variables studied were ordinal and no assumption of normality was made regarding their distribution. A two-tailed hypothesis test was performed for each correlation. The null hypothesis established the absence of an association between the variables ($H_0: \rho = 0$), whereas the alternative hypothesis proposed the existence of a statistically significant relationship

(H1: $\rho \neq 0$). Statistical significance was assessed using the associated p-value, with a significance level of 0.05. Therefore, when $p < 0.05$, the null hypothesis is rejected and it is concluded that there is statistical evidence of a relationship between the study variables. Conversely, when $p \geq 0.05$, the null hypothesis is not rejected and it cannot be concluded that a statistically significant relationship exists between the variables.

Table 1 presents the relationships analysed.

Table 1. Correlations

Variables analysed	Spearman's rho	p-value
Ethical challenges – need for training	0.212	0.0001
Capacity for adaptation – need for training	0.202	0.0002
Capacity for adaptation – Perception of GenAI	0.181	0.0010
Use of GenAI–perception of GenAI	0.176	0.0014
Use of GenAI–capacity for adaptation	0.175	0.0015

Source: Authors' own elaboration (2026)

As can be observed, several statistically significant correlations were identified. However, all were weak, with coefficients ranging from 0.175 to 0.212, indicating weak positive relationships between the variables analysed. The strongest correlation was observed between perceptions of the ethical challenges associated with GenAI and the need for specific training in its use ($\rho = 0.212$; $p = 0.0001$). This result indicates that teachers who perceive these ethical challenges more strongly also tend to express a greater need for training to address GenAI appropriately in the classroom. A positive relationship was also found between capacity for adaptation and the need for training ($\rho = 0.202$; $p = 0.0002$). This means that teachers who perceive themselves as more adaptable to technological change are also more aware of the importance of developing specific competences to integrate GenAI effectively into their teaching practice. Similarly, positive relationships were observed between capacity for adaptation and perceptions of the impact of GenAI on education ($\rho = 0.181$; $p = 0.0010$), and between the use of GenAI in the classroom and perceptions of its impact ($\rho = 0.176$; $p = 0.0014$). These findings indicate that a favourable assessment of its educational potential tends to be associated with a greater willingness to use it.

A positive correlation was also observed between GenAI use and capacity for adaptation ($\rho = 0.175$; $p = 0.0015$). This indicates that teachers who perceive themselves as having a greater capacity to adapt incorporate GenAI more frequently into their daily practice.

Although all the correlations identified were statistically significant, their low magnitude once again suggests that the adoption of GenAI in educational contexts does not depend on a single factor, but rather on a combination of variables related to perceptions, technological competences, training and assessments of its ethical implications.

Finally, to examine the current teacher profile according to the level of GenAI use and determine whether there were significant differences between teachers who use it regularly and those who do not, the non-parametric Mann–Whitney U test was conducted, as two independent groups were compared and the study variables were ordinal.

Table 2. Comparison between teachers who use GenAI and those who do not

Variables analysed	Mean for teachers who use GenAI	Mean for teachers who do not use GenAI	p-value
Capacity for technological adaptation	4.20	3.89	0.0016
Challenges	3.83	4.04	0.029
Training needs	4.73	4.71	0.53

Source: Authors' own elaboration (2026)

The results presented in Table 2 confirm that teachers who use GenAI display higher levels of technological adaptability than those who do not, with this difference being statistically significant ($p = 0.0016$). Significant differences were also found in perceptions of the challenges arising from its use, as

teachers who do not use these tools express slightly greater concern. This finding suggests that greater concern about these barriers may be associated with more cautious adoption.

By contrast, no significant differences were found regarding the need for training, as both groups reported virtually identical levels. This finding reinforces the point made in the previous section concerning the widespread demand for training among teachers, regardless of whether or not they already use these tools in their teaching practice.

5. Discussion

The results provide a deeper understanding of how teachers are approaching the incorporation of GenAI into education, as well as how this technology is influencing their professional identity.

Overall, the data show that teachers hold predominantly positive perceptions of the impact of GenAI on education, which is reflected in their favourable disposition towards its integration into teaching and learning processes. Nevertheless, the results also indicate that a positive perception does not necessarily translate into its systematic incorporation into the classroom. This, in turn, confirms the existence of a gap between attitudes and technological adoption, in line with the research conducted by Petrucco et al. (2025), who likewise note that, although teachers tend to recognise the potential of GenAI, they do not routinely integrate it into their teaching practice because of factors such as training, technological confidence and institutional conditions.

Regarding the first research question, the results show that teachers perceive GenAI primarily as a pedagogical support tool, particularly for generating ideas, designing activities and creating teaching materials. These uses indicate that GenAI is beginning to play a complementary role within the educational process, as it facilitates certain tasks and contributes to the gradual transformation of the teacher's role. In this respect, the integration of GenAI appears to reinforce the role of the teacher as a designer of learning experiences and a pedagogical facilitator or mediator, rather than merely a transmitter of knowledge (Bennett and Royce, 2026; Bower et al., 2024).

Another relevant finding is that age does not emerge as a determining factor in the acceptance of GenAI, since even older teachers hold positive perceptions of its educational impact. In this respect, the data show that age explains very little of the variation in perceptions of AI and that the main difference appears to lie in technological self-efficacy. This means that the transformation of teaching in response to GenAI is not generational but competence-based. This calls into question certain interpretations that associate resistance to innovation with generational factors, since the data reveal a relatively broad intergenerational consensus regarding the potential of GenAI. This indicates that its adoption may depend more on factors related to training or digital competences than on strictly demographic variables, as also noted by Garzón et al. (2020) and Krumsvik et al. (2016).

The cluster analysis identified three distinct teacher profiles in relation to the incorporation of GenAI into teaching practice: innovative teachers, traditional teachers and cautious teachers. These profiles reflect different degrees of engagement with technology, ranging from more active adoption to more cautious or reflective positions. Thus, while innovative teachers display greater integration of GenAI tools and a greater capacity to adapt to technological change, traditional teachers occupy an intermediate position characterised by recognition of its potential but a still limited level of use. Cautious teachers, for their part, adopt a more reflective position, marked by greater attention to the ethical and pedagogical challenges associated with the use of these tools. This finding is consistent with other studies that place teachers between pedagogical optimism and professional uncertainty (Conde-Carmona & Padilla-Escorcia, 2025; Dúo-Terrón, 2023). In this regard, the results of the correlational analysis enable these profiles to be interpreted in greater depth. The positive correlations observed between the use of GenAI, perceptions of its impact and the capacity for technological adaptation suggest that these factors tend to reinforce one another among teachers who actively integrate these tools into their educational practice. This relationship helps to explain the characteristics of the innovative teacher profile, whose members display higher levels of adaptation and more frequent use of GenAI.

Similarly, the correlation identified between perceptions of challenges and the need for training provides a clearer understanding of the position adopted by cautious teachers, who are characterised by a more passive attitude towards technology and greater concern about its pedagogical and ethical implications. The results of the correlational analysis therefore not only support the trends observed in

the cluster analysis, but also reveal that the adoption of GenAI responds to a combination of factors extending beyond the usual demographic variables or teaching experience, since it is related to teachers' perceptions, technological competences and ethical concerns.

Another noteworthy aspect is the cross-cutting role of ethical considerations in the implementation of GenAI. The data show that ethical concerns are common to all profiles and educational stages, regardless of perceptions of the technology's impact. However, these concerns do not appear to represent rejection of GenAI, but rather a somewhat more cautious and passive attitude towards the challenges involved in its appropriate implementation. Teachers demand transparency regarding the algorithms used in educational systems, particularly in relation to data privacy, academic integrity and assessment (Farisco et al., 2020; Mökander & Floridi, 2021; Stahl et al., 2022).

Regarding the challenges perceived by teachers more generally, a lack of training is the main barrier identified. The development of digital competences is not merely a demand, but a cross-cutting need identified across all educational stages. Teachers do not feel adequately prepared to work with these tools, meaning that acquiring new skills to integrate GenAI appropriately, critically and responsibly is a necessary condition for its pedagogical implementation (Chiu et al., 2022; Chounta et al., 2021). The analysis of the competences considered necessary to address these challenges reinforces this interpretation. Competences such as GenAI literacy, technological adaptability and critical thinking emerge as the central elements identified by teachers for integrating GenAI into their daily practice. This supports the idea that its incorporation into education requires not only technical skills but also pedagogical competences that enable teachers to evaluate and use these tools responsibly.

Against this backdrop, it becomes clear that the implementation of GenAI in education cannot be interpreted solely as a pedagogical innovation, but rather as a process involving the reconfiguration of teachers' professional identity. In this new context, teachers face the challenge of integrating intelligent tools while maintaining their role as facilitators and mediators of learning within the educational process. From this perspective, the results show that, far from replacing teachers' work, GenAI is driving a gradual transformation of their role. Nevertheless, this process of change is not occurring uniformly: while some teachers are moving towards more innovative pedagogical models, such as active methodologies, others continue to teach through more traditional approaches characterised by more transmissive and less experiential forms of instruction.

Finally, having addressed all the questions posed at the outset of the research, it can be stated that teachers' perceptions of GenAI are predominantly positive, although its adoption in the classroom depends on factors such as the capacity for technological adaptation, training and the ethical concerns associated with its implementation. Furthermore, the analyses conducted reveal the existence of different teacher profiles in relation to GenAI, confirming that its full integration into the classroom forms part of a complex process of professional transformation rather than an isolated technological change.

6. Conclusions

This study demonstrates that teachers' relationship with GenAI does not follow a uniform trajectory, but instead develops progressively and unevenly, giving rise to distinct teacher profiles that clearly reflect different levels of technological adaptation and competence development.

One of the study's most significant contributions is the finding that the acceptance of GenAI does not appear to be determined by generational factors, challenging the idea that age constitutes a barrier to the incorporation of these technologies into education. By contrast, variables such as capacity for technological adaptation, level of digital competences and training play a much more decisive role in the use of GenAI in teaching practice.

The results also show that the main difficulty involved in integrating GenAI into the classroom is not related to direct opposition among teachers, but rather to their perception that they are insufficiently prepared to use it in a pedagogically appropriate manner. In this respect, training represents the bridge that would enable teachers to incorporate these technologies critically, reflectively and in a pedagogically meaningful way. From this perspective, the results suggest that the incorporation of GenAI into education should be understood as part of a broader process of professional transformation.

In this new context, the role of teachers neither disappears nor is replaced by technology, but instead continually evolves towards functions more closely associated with pedagogical mediation, the design

of learning experiences and critical guidance in the use of intelligent tools. Ultimately, rather than replacing teachers' work, GenAI is helping to reconfigure their professional profile, driving a transition from more transmissive educational models towards more participatory approaches adapted to increasingly technological educational environments. Nevertheless, the results highlight the need to develop specific teacher-training programmes in GenAI that are not limited to technological literacy, but also incorporate pedagogical and ethical dimensions that enable the responsible adoption of these technologies.

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