



Between Curiosity and Caution: Exploring Attitudes Toward Artificial Intelligence in Education

Beáta Keséné Bohácsi¹ , Zoltán Csizmadia² 

¹Széchenyi István University, 9026 Győr, Hungary, Egyetem tér 1.
kesene.bea@sze.hu

²Széchenyi István University, 9026 Győr, Hungary, Egyetem tér 1.
csizmadia.zoltan@sze.hu

*Corresponding author

Abstract: In education, artificial intelligence presents a current challenge as well as a glimpse into the future. The opinions of Győr secondary school teachers and students on AI's impact on education were the focus of our research. In this regard, we believe that it is necessary for adolescents to acquire and utilize new technologies, as they can explore the best ways to use them in the future, for everyday life or university studies. However, it is also true that this knowledge is needed not only by students but also by teachers. We would answer questions such as should we view AI as a helpful tool or a dangerous threat in education? The responses of 4 high schools reveal that students' enthusiasm and teachers' cautious curiosity point to an exciting future. Both groups see new opportunities for learning, but uncertainty about the changes also emerges. Openness to new ideas and continuous learning are key to success, according to comparative analysis. Research shows that AI can become a driver of education if we learn to use it wisely together. Schools of tomorrow are under construction; the key question is: who will define their future?

Keywords: AIED, Győr, Secondary School, Future, Teaching-learning Process

1 Introduction

Artificial intelligence (AI) is increasingly shaping human life. AI applications are present in numerous aspects of daily activities and professional contexts. In the early 21st century, humanity needed to find answers and good practices to live with AI – not only to facilitate working and daily life, but also to facilitate learning and teaching methods. Artificial Intelligence in education (AIED) is rapidly evolving, too. Artificial intelligence-based educational technology (AI-EdTech) has been increasingly used in primary and secondary education in many countries (Holmes et al., 2022; UNESCO, 2023). We need to understand the needs of teachers, students and make comprehensive decisions with the help of policymakers. First, it is important to assess these needs, and then substantive work can begin, along with the selection and implementation of

© The Author(s) 2026

G. Szabó-Szentgróti et al. (eds.), *Proceedings of the Kautz Conference on Business and Economics 2025 (KCBE 2025)*, Advances in Economics, Business and Management Research 381,

https://doi.org/10.2991/978-94-6239-658-6_23

appropriate applications in educational institutions. From brick to brick, we need to create a functioning learning-teaching system in Hungary in secondary education and in universities, supporting users (teachers and students) and using the latest technologies, as well as avoiding problems related to GDPR and ethical questions.

1.1 AIED in the world: What were they found abroad?

Today, more studies and research are being conducted on this topic. This is a very challenging world, and all countries must implement the best ways to meet the needs of new technologies. Wang in their studies in 2024 employed a dual-phase methodology that combined bibliometric analysis with systematic review of the literature. Using the Web of Science database, they initially identified 3,690 articles containing "artificial intelligence" and "education" in titles, abstracts, or keywords. (Wang et al., 2024)

Most education systems in the United States and the EU, from Nigeria to Australia, want to prepare the next generation for the use of Artificial Intelligence, making it easier for them to live. However, the older generation needs to pay special attention so that the positive effects of new technologies are also reflected in their lives. Teachers must learn to use AI in teaching and preparation, using time-saving methods.

Sanusi and his co-authors conducted a qualitative study in which they examined the perspectives of key stakeholders in Nigeria on the integration of artificial intelligence (AI) into K-12 education. The study revealed that stakeholders generally recognized the transformative potential of AI in education but had different understandings of its practical implementation. Teachers emphasized the need for extensive professional development and expressed concerns about their ability to effectively integrate AI tools into their teaching practice. They recognized AI's potential to reduce administrative workload and enhance personalized learning, but worried about maintaining pedagogical quality and student engagement. The students showed positive attitudes toward AI integration, viewing it as an opportunity for more engaging and personalized learning experiences. However, they also expressed concerns about the potential impact on critical thinking skills and human interaction in education. (Sanusi et al., 2025)

The next research is a study by Olga Viberg (2024). They surveyed 508 K-12 teachers in Brazil, Israel, Japan, Norway, Sweden and the United States to understand what motivated teachers to trust AI-based educational technologies (AI-EdTechs). The study found that teachers who have greater self-efficacy in AI and a better understanding of AI perceive more advantages, report less concern, and ultimately have greater trust in AI-EdTech. They also found that cultural values significantly influence trust: teachers in countries with higher uncertainty and long-term orientation tend to trust AI more. In addition, there are also significant geographical differences. Brazil, Israel and Japan are more trusted than Norway, Sweden and the United States. The study emphasizes the importance of strengthening teachers' knowledge of artificial intelligence and

considering cultural factors to support the use of artificial intelligence tools in classrooms.

The research conducted by Christina Rapti and P. Panagiotidis (2024) provides valuable information on how language teachers perceive AI and highlights both the promise of AI-enhanced teaching methods and the current challenges of large-scale implementation in classrooms. Greek foreign language teachers increasingly recognize AI as an important tool for improving the quality of education, particularly for differentiation. There is still a significant gap in the use and understanding of AI applications in classroom flip models, which requires further research, training, and resources. Effective integration of AI in education requires the removal of barriers related to teacher training, access to technology, and educational support.

The JISC Report (2025) confirmed that students and learners do not want AI to be treated as something to be feared or avoided. Instead, they want practical support to help them use it well. That means clear policies, consistent guidance, and training in how to use AI ethically, effectively, and responsibly. They want to build the skills that will help them stay current in a fast-changing world, skills like critical thinking, prompt writing, fact-checking, and understanding where and when AI is appropriate.

Last but not least, let us show a European report comparing seven countries by Vodafone (2025). AI is rapidly reshaping education in European secondary schools, transforming how students learn and interact with technology. Although its potential to improve academic performance and improve learning outcomes is widely acknowledged, its adoption brings with it pressing challenges. Schools, educators, NGOs, and policy makers face an urgent need for clear guidance, comprehensive training, and robust frameworks to navigate this evolving landscape. Here is a table summarizing the views of teachers' and students' on AI in education by countries.

Table 1: Vodafone European report - summarizing

<i>Country</i>	<i>Teacher Preparedness (Students' Perception)</i>	<i>Familiarity with AI of student and usage</i>	<i>Support System for AI Use</i>	<i>Concerns</i>	<i>Learning & Assessment Preferences</i>	<i>Digital Access & Infrastructure</i>
<i>Türkiye</i>	The highest (60% perceive teachers well-prepared)	Strongest AI importance (85% for careers), highest practical use (73%)	The highest support from teachers (67%), peers (78%), parents (77%)	The highest concern about bullying through Deep Fakes (64%), inequality (49%)	High support for continuous assessment (82%), AI during exams (52%)	Moderate, better than southern Europe but less than UK
<i>UK</i>	Moderate	The highest deep familiarity with AI (19% very familiar)	Balanced support across teachers, peers, and parents (~60% each)	High concern about false cheating accusations (~42%)	Strong support for continuous assessment (77%), AI during exams (~40%)	Best digital access and internet connectivity

Germany	Low (38% perceive teachers well-prepared)	Lower AI familiarity, lowest practical use	Lowest support, especially for teachers (44%)	High concern about cheating accusations (43%), lower concern about over-reliance (37%)	Lower support for continuous assessment (53%)	Good access to devices, high compared to the European average
Greece	Lowest (29% perceive teachers well-prepared)	Low AI familiarity and importance perception	Low support; teachers (44%) and peers (54%)	Moderate; high concern about digital access and infrastructure	Low support for continuous assessment	Highest barriers: poor device access (74%) and internet
Portugal	Moderate	Lowest AI familiarity	Moderate support	Moderate concerns	Moderate preferences for assessment	Significant infrastructure challenges
Spain	Moderate	Above-average AI familiarity	Moderate support	Worry about cheating detection difficulties	Moderate support for continuous assessment	Moderate access and infrastructure
Romania	Moderate	Moderate AI familiarity and use	Moderate support	The greatest concern about over-reliance (54%)	Moderate preferences for assessment	Good access but lower than UK

Source of data: Vodafone Foundation: AI in European Schools: A European report comparing seven countries (2025)

1.2 AI and AIEd in Hungary

In July 2025, GKI conducted representative surveys of 1,000 Hungarians to examine the use of artificial intelligence (AI) in everyday life and work. Nearly half of the respondents never use artificial intelligence for work or research, and only 17% use it frequently. The use of AI among young people and students is much higher, with 90% of students using it for research. The most active users are private sector office workers and independent professionals, while the use of public sector workers remains low. Despite increasing use, 70% of respondents feel a certain level of threat relating to work by AI in the next five years — despite only 5% believing it to be serious. (PrimOnline, 2025)

Hartyáni (2024) found that Hungarian secondary school students are actively using artificial intelligence tools and see their usefulness in academic and creative tasks, but face challenges related to language and artificial intelligence limitations. They recognise that teachers' attitudes to AI are different and express the need for more structured support, education, and policies on the literacy and ethical use of AI in classrooms. This highlights the gap between the adoption of AI by students and the reaction of the formal education system in Hungary.

But the truth is that learning plan in a few minutes, personalized exercises with a button, artificial intelligence-based presentations - this is not the future of hundreds of Hungarian teachers. The first AI training course launched by Yettel's ProSuli digital education programme for teachers generated enormous interest, with nearly 500 teachers gaining practical knowledge and inspiration on how AI can revolutionize teaching in April 2025. "We are seeing the rapid spread of artificial intelligence in students – both in their free time and as a tool for learning. If students use these tools, teachers should not be left behind. AI is a powerful assistant that complements the skills of teachers rather than replacing them. Teacher training has been a cornerstone of the ProSuli programme from the beginning. We have always tried to respond to current needs, and AI is no exception. Even basic understanding, combined with a good mindset, can make AI a useful part of everyday learning, from the development of exercises and learning plans to the preparation of visual aids and presentations. It was really inspiring to see hundreds of teachers register for the first AI training and immediately apply what they learnt. (Yettel, 2025)

1.3 Research objective and questions

The purpose of this paper is to determine the views of teachers and students in secondary schools in Hungary, especially Győr, on the use of AI-based technologies in education. As such, we propose to answer the following research questions:

- What are the average AI-based technologies and tools that students and teachers use in everyday life?
- What are the opinions of Hungarian secondary school teachers and students on the implementation of artificial intelligence in education?
- What are the advantages and disadvantages of implementing artificial intelligence technologies in education? What are their views? Future predictions?

1.4 Theoretical Framework

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is a theoretical framework that explains how people accept and use new technologies. Developed by Fred Davis in 1989, TAM focuses on predicting and explaining user behavior regarding technology adoption (Davis, 1989). The model identifies two primary factors that determine technology acceptance:

- Perceived Usefulness (PU): Defined as "the degree to which a person believes that using a particular system would enhance their job

performance" (Davis, 1989, p. 320). When users perceive a technology as beneficial to achieving their goals, they are more likely to adopt it.

- Perceived Ease of Use (PEOU): Defined as "the degree to which a person believes that using a particular system would be free from effort" (Davis, 1989, p. 320). Simple and intuitive technologies are more readily accepted, while complex systems face greater resistance.

In educational contexts, TAM provides a robust framework for understanding how teachers and students perceive and adopt AI and other instructional technologies. The systematic review by Granić and Marangunić (2019) confirmed that TAM and its variants are the most widely validated models in educational technology research, consistently predicting approximately 40-70% of variance in behavioral intention across diverse learning environments. This makes TAM particularly relevant for examining secondary school stakeholders' attitudes toward AI integration, as explored in the present study.

UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY (UTAUT2) - Venkatesh et al., 2012

The Unified Theory of Acceptance and Use of Technology (UTAUT) was developed by Venkatesh et al. (2003) with the objective of integrating previously existing technology acceptance models that had been employed in parallel, including the Technology Acceptance Model (TAM), Theory of Planned Behaviour (TPB), and Theory of Reasoned Action (TRA), among others. The model provides a more comprehensive and robust framework for predicting the acceptance and use of technology in both organisational and educational contexts. UTAUT2 is particularly well-suited for examining AI adoption in educational contexts because it accounts for:

- Teacher'and student' enjoyment and participation with AI tools (hedonic motivation)
- Cost-benefit considerations in resource-constrained school environments (price value)
- The development of routine usage patterns over time (habit)
- Individual differences such as age, sex, and experience moderate technology acceptance

The model has been successfully applied in various educational technology studies, including e learning platforms, mobile learning apps, and AI-based

educational tools, making it highly relevant for understanding secondary school teachers' and students' attitudes toward AI integration in education.

This study adopts the UTAUT2 framework (Venkatesh et al., 2012) to understand teachers' and students' acceptance of AI in education. UTAUT2 extends the original organizational-focused model by incorporating hedonic motivation, price value, and habit—constructs that are particularly relevant for understanding technology adoption in educational settings where both intrinsic enjoyment and resource constraints play significant roles.

2. Research methodology and sample

Questionnaire Development

The questionnaires were developed at the end of 2023, based on international surveys in Europe and validated instruments from previous studies. The questionnaire consisted of 26 items in three main sections: (1) demographic information, (2) perceptions of AIEd, and (3) future usage intentions.

Sampling Method

A convenience sampling method was used, targeting four secondary schools in Győr that agreed to participate. These schools are two vocational secondary schools, non-grammatical schools, and two technical universities. The sample included 140 Hungarian Győr-located secondary school students (14 to 19 years of age) who completed my questionnaire (77 female; 63 male). In addition, 69 Hungarian Győr-located secondary school teachers (39 female; 30 male). The teachers' respondents were of different age categories, with the largest number of respondents falling into the 50-age category. Most of the teachers live in cities (45 people).

Data Collection Procedure

Data were collected between January and February 2025 using self-administered online questionnaires distributed through QR codes. Participants completed the questionnaire anonymously, ensuring confidentiality. Ethical approval was obtained from the Faculty of Apáczai Csere János of Széchenyi István University. Online research can be shorter than face-to-face interviews.

This has the advantage of not influencing interviewers. Anonymity and the possibility of self-complete make honest answers more likely.

Data Analysis

Descriptive statistics (means, standard deviations, frequencies) were calculated using IBM SPSS Statistics 25.

Limitations

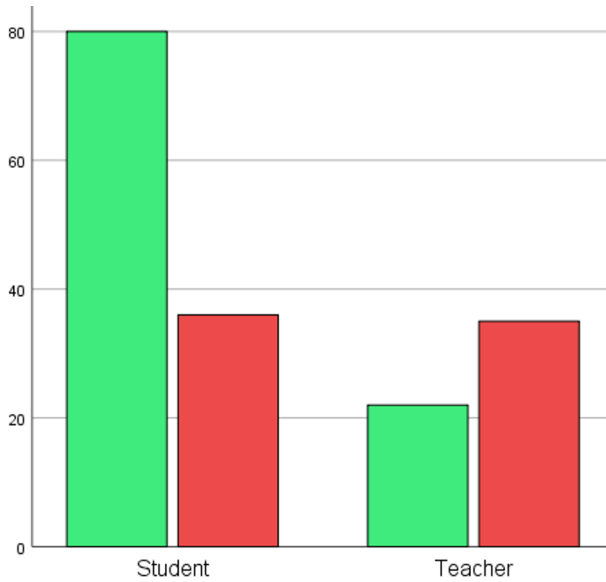
The study has several limitations. The convenience sample from four schools in Győr limits the generalizability to other regions of Hungary or secondary schools with different characteristics. The relatively small sample of teachers (n=69) can affect statistical power.

3 Results

3.1 Usage of AI

In the midst of the digital revolution, it is still worth asking if respondents are using artificial intelligence technology. It is important to remember that even if someone is not yet using these tools in any field, they may encounter AI-powered tools in daily life. Fortunately, most of the respondents have already used AI in their studies or teaching.

Figure 1: Answers to question 9
(Have you ever used AI in your studies/teaching? green – yes, red – no)



Source of data: Own research

In the market for Artificial Intelligence, there is a wide variety of tools based on artificial intelligence technology. We created these applications in groups with a set of six elements. When asked which of the AI tools mentioned are the most widely used, students and teachers clearly demonstrate the most frequently used chatbots, translation programmes, and image search applications. Meanwhile, robotic tools are finally available.

Table 2: Answers to question 8

Which of the following AI technologies have you used?							
Student or teacher?		Machin e learnin g (e.g. Google Cloud Vertex AI)	Natural language processin g (e.g., translatio n - DeepL)	Compute r vision (e.g. Google Image Search)	Robotics (e.g., Lego Mindstor ms EV3 robot)	Chatbots (e.g., ChatGP T)	Virtual assistant (e.g., K&H bank - Kate)
Studen t	Mean	.47	.72	.80	.15	.79	.47
	Std. Dev	0.501	0.453	0.400	0.355	0.407	0.501
	Mean	.33	.51	.65	.18	.70	.49

Teacher	Std. Dev	0.476	0.504	0.481	0.384	0.462	0.504
---------	----------	-------	-------	-------	-------	-------	-------

Source of data: Own research

When we ask how students and teachers use text generation tools creatively in the classroom, we discover that the most common answer is a quick search for information. The other locations in the order are different. Students love drawing, responding to complex questions, looking for sources, while teachers like brainstorming, drawing, looking for sources, and other solutions. (See the table below for the concrete numbers.)

Table 3: Answers to question 14

How do students/teachers use text generation tools creatively in the classroom?

Students	Mean	Std. Dev	Teacher	Mean	Std. Dev
Quick information search	.80	0.400	Quick information search	.56	0.501
Sketching	.73	0.444	Brainstorming	.51	0.504
Answering complex questions	.60	0.491	Sketching	.51	0.504
Search for sources	.54	0.500	Search for sources	.42	0.498
Story writing	.50	0.502	Searching for alternative solutions	.30	0.462

Source of data: Own research

3.2 Teaching-learning process with AIEd

This section contains questions related to the AIEd teaching and learning process.

First, we want to know if artificial intelligence can improve the learning process. Students 78% believed it could, while teachers 52% said the same.

Table 4: Answers to question 10

Can artificial intelligence improve the learning experience?

		Percentage			Percent
Student	Not at all	1.7	Teacher	Not at all	7.0
	2	3.4		2	8.8
	3	16.4		3	22.8

	4	51.7		4	49.1
	Completel y	26.7		Completel y	12.3

Source of data: Own research

Plagiarism and references to AI are also becoming increasingly important problems. Therefore, we tried to answer the question of how relevant — or even necessary — teachers and students considered the use of AI content in the submission of their work. We highlighted four important reference elements (images, text, music input, and programming) for the importance of using AI generated elements. The responses clearly show that both sides consider it important to indicate the source. The concrete data are shown below in the table.

Table 5: Answers to question 13

When using the listed content (e.g., in a PowerPoint presentation or homework assignment), is it necessary to cite the source if it was created with AI?

	Percent	Yes	No
Picture generation	Student	62.1	33.6
	Teacher	75.4	21.1
Copying text	Student	59.5	36.2
	Teacher	82.5	14.0
Using music	Student	44.0	51.7
	Teacher	77.2	19.3
Programming / IT operations	Student	54.3	41.4
	Teacher	75.4	21.1

Source of data: Own research

3.3 School of the future with AIEDTech

The questionnaire also contains two questions that may be seen as a more futuristic vision. One of them concerns AI superpowers: How AIEDTech (especially, for example, ChatGPT) will help teachers and students in the near future? The teacher and student's responses are slightly different, but they show what each side is thinking. For example, it is understandable that teachers place time savings, assign additional tasks, and individual learning paths at the top of their list. Although time savings were also the first among students, automatic corrections and feedback followed.

Table 6: Answers to question 25

In your opinion, what "superpowers" can AI give teachers/students?

Students	Mean	Std. Dev	Teacher	Mean	Std. Dev
Time saving	.65	0.480	Time saving	.67	0.476
Automatic correction	.59	0.495	Assigning additional tasks	.58	0.498
Automatic feedback	.56	0.498	Individual learning path	.54	0.503

Source of data: Own research

On the other hand, we were curious to know how likely artificial intelligence would replace certain educational tasks. This list includes tasks such as conducting examinations/oral examinations, teaching classes, tutoring for a topic, solving specific tasks for you, or even conducting entrance examinations and providing answers during oral examinations. Students (43%) and teachers (52%) probably had the most likely scenario of solving specific tasks. Other alternatives were considered to be much less likely.

Table 7: Answers to question 22

How likely do you think it is that an AI application is...:

1 point: Not likely at all – 4 points: Absolutely certain to happen

Educational tasks	Student		Teacher	
	Mean	Std. Dev	Mean	Std. Dev
... teaching classes	1.80	0.923	2.25	1.021
... tutoring for a topic/subject	2.29	0.945	2.53	0.847
... providing answers during examinations	2.83	0.991	3.00	0.864
... conducting examinations/oral examinations	2.10	1.034	2.44	0.989
... conducting entrance examinations	1.97	0.976	2.27	1.012
... solving specific tasks for you	3.06	1.013	3.38	0.713

Source of data: Own research

4 Future plans – further research

These researches are being carried out at the University of Széchenyi István, Győr. We would like to compare the data of the two types of educational institutions. We want to see how newcomers and older generations use AIEdTech at a higher level. The difference between secondary and higher education is huge. Skills and knowledge are not enough to jump over obstacles – students need more smart thinking skills and have to be resourceful in many cases. Is it easier or harder to cope with these new technologies, or is evidence of their application periodically?

The Hungarian Government has taken steps to require higher education institutions to review their educational activities on the use of artificial intelligence (AI). Under the Higher Education Act, Hungarian higher education institutions are now required to carry out a comprehensive review of their internal regulations. In particular, the research and examination rules for the use of AI in higher education systems will be reviewed, and the deadline for submission is September 1, 2025. This initiative would provide an opportunity to review guidelines for the use of artificial intelligence in academic contexts. Through the establishment of guidelines, AI tools and technologies will be incorporated in a responsible and well-regulated way.

In addition to regulatory reviews, higher education institutions can also benefit from the evaluation of their curriculum and learning results, as far as how to integrate artificial intelligence into teaching and learning activities. These include introducing basic AI courses, integrating AI applications into existing areas, or providing ethical and technical training in the use of AI. The intention of the Hungarian Government to support this initiative is to ensure that students are adequately prepared for the challenges and opportunities of the digital age. By promoting knowledge and competence in artificial intelligence, higher education institutions can improve the employability of students, ensuring that graduates are effectively navigating an increasingly artificial intelligence-driven labor market.

5 Discussion

In the field of education, the transfer of knowledge on artificial intelligence can begin in primary schools by September 2025. According to the Minister of Foreign Affairs, László Palkovics, this does not necessarily require changes in curriculum, and it is sufficient to give teachers the necessary tools. "The teacher simply says, "This is ChatGPT, here for the children, who asks and answers, this is a useful tool. But when you use it, think about what you are doing. Feel free

to use it, but do not try to deceive it. You can check your homework by yourself. Look at what ChatGPT has written, what you have written, and learn from the differences. The point is that your knowledge and thoughts are always the most important," he said. (Rádi, 2025)

The findings of this study align with the UTAUT framework in several key areas. The students' high perceived usefulness of AI tools (78% believed AI could improve learning) reflects the performance expectancy construct of UTAUT, suggesting that when learners perceive clear benefits, they are more likely to adopt new technologies. Similarly, the frequent use of user-friendly tools such as ChatGPT and translation programs among both groups demonstrates the importance of perceived ease of use, consistent with TAM predictions.

However, the gap between teachers is large. (52%) and students (78%) in perceiving AI's potential to improve learning may reflect differences in social influence and facilitating conditions. Teachers may be responding to professional uncertainties, limited institutional support, and insufficient training - factors that UTAUT identifies as critical barriers to technology adoption. This suggests that policy interventions should focus not only on the technology itself but on creating supportive organizational environments that reduce teachers' perceived effort expectancy and enhance their confidence in using AIED tools.

6 Conclusions

The research proves that the age of artificial intelligence is not a distant future but a technology that exists in our daily lives and affects it to some extent. Teens are often encountered by young people on social media platforms, but it can also be a popular tool to complete school assignments. The key question is how to use AI-based programmes and tools to improve social welfare and quality of life. Responsible use and consideration of human factors is essential to maximize the benefits of AI while considering any negative consequences, particularly paying attention to the transmission of our knowledge in this field to young generations. The results show that most of the children surveyed have already encountered artificial intelligence in daily activities and that they are more interested in technological innovations than afraid of them.

It is also clear that this process has been largely spontaneous so far: yet there are no coordinated central action plans affecting the entire education system or aligning the training levels (summer, 2025), and with a few exceptions, there is

no professional material that can support teachers and students in preparing for the introduction of artificial intelligence into schools in Hungary (Verebics, 2025).

6.1 Economic and Labor Market Implications

The findings of this study have significant implications for Hungary's labor market preparedness in an AI-driven economy. As employers increasingly seek graduates with AI literacy and digital competencies, secondary education plays a crucial role in developing these foundational skills. The enthusiasm shown by Győr students towards AI technologies suggests a willingness to engage with tools that will be essential in future workplaces. However, the cautious approach of teachers indicates a need for targeted professional development to ensure educators can effectively guide students in developing both technical AI skills and critical thinking about AI's societal impacts. Investing in AI education at the secondary level can improve Hungary's competitiveness in the global knowledge economy and prepare a workforce capable of innovating with and managing AI technologies.

6.2 Educational Policy Implications

From an educational policy perspective, this research highlights several critical areas requiring attention. First, there is an urgent need for comprehensive teacher training programmes specifically focused on AIED integration, moving beyond general digital literacy to address AI-specific pedagogical approaches. Second, curriculum frameworks must be updated to explicitly include AI literacy as a learning objective across subject areas, not merely as an additional to ICT education. Third, infrastructure investments are necessary to ensure equitable access to AI tools between schools in different regions and socioeconomic contexts. The Hungarian government's 2025 mandate for higher education institutions to review AI policies provides a model that could be adapted for secondary education. However, as this study demonstrates, effective implementation requires not just policy directives but sustained support, resources, and ongoing dialogue between educators, students, policymakers, and technology developers.

References

1. Act CCIV of 2011 on national higher education. Homepage, <https://njt.hu/jogszabaly/2011-204-00-00>, last accessed 2025/07/08
2. AI revolution in the classroom: Hundreds of Hungarian teachers are already using AI in their daily work. Homepage, <https://en.yettel.hu/press/press-release/ai-revolution-in-the-classroom-hundreds-of-hungarian-teachers-are-already-using-ai-in-their-daily-work>, last accessed 2025/08/15
3. Central Statistical Office of Hungary: Oktatási adatok, 2024/2025. Homepage, <https://www.ksh.hu/s/kiadvanyok/oktatasi-adatok-2024-2025-elozetes-adatok/index.html>, last accessed 2025/06/25
4. Davis, F.D.: Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly* 13(3), 319–340 (1989)
5. Fekete, K.: A magyar oktatásban már ma is jelen van a mesterséges intelligencia. Homepage, <https://makronom.eu/2023/10/28/a-magyar-oktatásban-ma-is-jelen-van-a-mesterséges-intelligencia/>, last accessed 2025/01/01
6. GKI Gazdaságkutató Intézet: Generációs szakadék az AI-használatban. Homepage, <https://hirek.prim.hu/cikk/162391/?noredir=1>, last accessed 2025/07/08
7. Granić, A., Marangunić, N.: Technology acceptance model in educational context: A systematic literature review. *British Journal of Educational Technology* 50(5), 2572–2593 (2019)
8. Holmes, W., Persson, J., Chounta, I.A., Wasson, B., Dimitrova, V.: *Artificial Intelligence and Education: A Critical View Through the Lens of Human Rights, Democracy and the Rule of Law*. Council of Europe, Strasbourg (2022)
9. Hartyányi, M., Satiene, Z., Ravotto, P., Balassa, I., Escuer, D., Tóth, L.P.: Secondary school teachers' attitudes toward AI integration in teaching: Survey across four European countries. Homepage, <https://www.itstudy.hu/sites/default/files/AI-in-Secondary-Schools.pdf>, last accessed 2025/01/01
10. Rádi, B.: Szuperszámítógépek, humanoid robotok, hamarosan berobban az új magyar valóság. Homepage, <https://www.economx.hu/gazdasag/palkovics-laszlo-interju-mesterséges-intelligencia-ai-mi-oktatás-szuperszámítógép-technologia-beruházások.812649.html>, last accessed 2025/08/10
11. Rapti, C., Panagiotidis, P.: Teachers' attitudes towards AI integration in foreign language learning: Supporting differentiated instruction and flipped classroom. *European Journal of Education* 7(2), 88–104 (2024)
12. Sanusi, I.T., Agbo, F.J., Dada, O.A., Yunusa, A.A., Aruleba, K.D., Obaido, G., Oyelere, S.S.: Stakeholders' insights on artificial intelligence education: Perspectives of teachers, students, and policymakers. *Computers and Education Open* 7, 100212 (2024)
13. Attewell, S.: Student perceptions of AI 2025. Homepage, <https://www.jisc.ac.uk/reports/student-perceptions-of-ai-2025>, last accessed 2025/01/01
14. UNESCO: *Global Education Monitoring Report 2023: Technology in Education—A Tool on Whose Terms?* UNESCO, Paris (2023)
15. Venkatesh, V., Morris, M.G., Davis, G.B., Davis, F.D.: User acceptance of information technology: Toward a unified view. *MIS Quarterly* 27(3), 425–478 (2003)
16. Venkatesh, V., Thong, J.Y.L., Xu, X.: Consumer acceptance and use of information technology: Extending the unified theory (UTAUT2). *MIS Quarterly* 36(1), 157–178 (2012)

17. Verebics, J., Tóth, É.: MI az iskolában: szabályozzuk – de hogyan? Homepage, <https://moderniskola.hu/2025/08/mi-az-iskolaban-szabalyozzuk-de-hogyan/>, last accessed 2025/07/15
18. Viberg, O., Cukurova, M., Feldman-Maggor, Y., et al.: What explains teachers' trust in AI in education across six countries? *International Journal of Artificial Intelligence in Education* (2024)
19. Vodafone Foundation: AI in European Schools: A European Report Comparing Seven Countries. Vodafone Foundation, Berlin (2025)
20. Wang, S., Wang, F., Zhu, Z., Wang, J., Tran, T., Du, Z.: Artificial intelligence in education: A systematic literature review. *Expert Systems with Applications* 252, 124167 (2024)

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

