Csilla Fuszek
Agata Hofman
Arjav Parikh
Luis Pastor
Agnieszka Kosiak
Krzysztof Zajączkowski

„Karto-Teka Gdańska", nr 1(16)/2025, s. 93–103
http://karto-teka.ptft.pl/
https://doi.org/10.26881/kg.2025.1.06

Road to a better self – ethical guidance to AI in education

Droga do lepszej wersji siebie – wytyczne etyczne dotyczące sztucznej inteligencji w edukacji

Abstrakt:
Artykuł analizuje etyczne i praktyczne implikacje zastosowania sztucznej inteligencji w edukacji (AIED), koncentrując się na jej wpływie na wartości ludzkie i relacje międzyludzkie. Choć AI oferuje korzyści, takie jak spersonalizowane nauczanie i poprawa wyników w nauce, niesie również ze sobą zagrożenia, takie jak ograniczenie myślenia krytycznego, nadmierne uzależnienie oraz obawy związane z prywatnością. Podkreślono także utratę kreatywności, uczenia ucieleśnionego oraz autentycznego kontaktu międzyludzkiego jako istotne problemy. Rola nauczyciela jako człowieka pozostaje kluczowa w promowaniu rozwoju osobistego oraz nauki społeczno-emocjonalnej. Inicjatywa FIRE (Forum for the International Renewal of Education) ma na celu integrację etyki, dobrostanu oraz kompetencji XXI wieku w edukacji opartej na AI. Głównym tematem artykułu jest zgodność sztucznej inteligencji z fundamentalnymi wartościami, takimi jak empatia, odporność i uczciwość. Ostatecznie artykuł opowiada się za podejściem skoncentrowanym na człowieku, w którym AI wspiera – a nie zastępuje – ludzki rozwój poprzez wspólnotę i relacje.

Słowa kluczowe: AIED, nauczyciel AI, nauczyciel jako człowiek, wartości i relacje międzyludzkie, etyka i dobrostan.

Abstract
This article examines the ethical and practical implications of Artificial Intelligence in Education (AIED), focusing on its impact on human values and relationships. While AI offers benefits such as personalized learning and improved academic outcomes, it also poses risks such as reduced critical thinking, over-reliance, and privacy concerns. The loss of creativity, embodied learning, and authentic human connection are highlighted as significant concerns. The role of the human teacher remains essential in fostering personal development and social-emotional learning. The FIRE initiative (Forum for the International Renewal of Education)[1] aims to integrate ethics, well-being, and 21st-century skills into AI-based education. A central theme is the alignment of AI with core values such as empathy, resilience, and integrity. Ultimately, the article advocates for a human-centred approach where AI supports, rather than replaces human growth through community and relationships.

Key words: AIED, AI teacher, Human Teacher, Human Values and Relationships, Ethics and Wellbeing.

1 https://firemanifesto.wixsite.com/fire

Introduction

For some time before the emergence of Artificial Intelligence, a technology which is currently transforming our everyday lives at an unprecedented pace, our world was characterised by uncertainty, rapid and unpredictable change, complexity, and a high degree of ambiguity. AI has exacerbated all these characteristics, and has perhaps, of all the different sectors, affected education the most profoundly, forcing institutions to make sudden and immediate changes to meet today's challenges[1].

The world of education is highly sensitive and constantly vulnerable to governmental policy changes and, while on the one hand it needs to respond immediately to the challenges of the world, its conventional system can, on the other hand, be cumbersome and slow. Meanwhile, it directly affects our children and our collective future. We believe, that introducing AI in a massive way to teenagers and young kids requires more careful study. There is no question then, of the ethical responsibilities of all those who might influence this system, particularly in regard the pace of technological development today[2]. With this responsibility in mind, the authors of the article – as the FIRE team – have set out to consider how the most fundamental human values could be reflected in an AI programme focused on education[3].

Benefits and disadvantages of AI in education

Benefits:

In recent years, research on the relationship between AI and education has proliferated, with a specific body of literature being produced on the benefits and disadvantages of AI. For understandable reasons, they approach the issue mainly from a practical perspective, but increasingly also address the impact on students' thinking processes. With regard to education, AI is impacting not only those teaching and learning, but also the entire institutional system. In this article we will highlight some of the impacts, advantages and disadvantages, specifically pertaining to students and education as a whole.

Within published literature the most commonly mentioned benefit of AI in the educational realm is the potential for individualized learning. Using AI may also lead to improved academic outcomes and enhanced student engagement[4]. AI is generally perceived as holding immense potential to enhance learning efficiency. Furthermore, AI can act as a tool for differentiation and to increase the teacher's toolbox. AI-powered tutoring systems

1 D. Bit, S. Biswas, M. Nag, M. *The Impact of Artificial Intelligence in Educational System*, "International Journal of Scientific Research in Science and Technology" 2024, Vol. 11, Issue 4.

2 A. M. Vieriu, G. Petrea, *The Impact of Artificial Intelligence (AI) on Students*, "Academic Development. Education Sciences" 2025, No. 15(3), p. 343.

3 W. Holms, I. Tuomi, *State of the art and practice in AI in education*, "Eur J Educ" 2022.

4 A. M. Vieriu, G. Petrea, *The Impact of Artificial Intelligence (AI) on Students*, op. cit.

are able to provide students with immediate feedback and assistance. These systems can simulate one-on-one tutoring, offering explanations, practice problems, and guidance, tailored to the student's level of understanding[5]. These systems have infinite patience and can potentially be of great benefit to those students who may need extra help.

In summary, AI is reshaping the very nature of learning. Personalized AI tools can help students master material at their own pace and improve test scores. But we need to ask the question: at what cost?[6]

Disadvantages:

The potential disadvantages of using AI in education include concerns around the risk of over-reliance on AI and dependency which may lead to diminished critical thinking skills[7]. Data privacy risks are mentioned as is the potential for academic dishonesty[8]. AI is also seen as potentially challenging traditional learning methods and impacting creativity in human cognition.

A significant concern is that this technology may replace human interaction and one-to-one relationships while at the same time hindering the development of critical thinking skills. The use of AI might also create a false impression of infinite control and capability, a kind of omnipotence, which could potentially eliminate humbleness and consequently affect the deveopment of selflessness and the sense for meaning in life. Disembodied learning – the purely head-based engagement in the screen is listed as a disadvantage.

It also needs to be highlighted that AI experts have expressed concern over the pace of development in this field. Technological progress is potentially moving faster than the ability of human beings to adapt to these innovations in a healthy and integrated manner. The risks of stress, anxiety, and mental illness are present more than ever. Through the promotion of screen use, one may be contributing to the one-sided development of a young person where the emphasis moves towards disembodied education.

AI is a powerful tool which is able to access almost unlimited amounts of information and to perform complex tasks and functions. It is critically important to discern which of the everyday tasks which we engage in are fundamentally integral to the holistic health of a human being. Memory, planning, spatial navigation, the slow processing of information, may all be relinquished into the 'expertise' of AI. When these skills are lost, the human being may become dependent on AI for skills and tasks which were once natural and innate to the human being. Many cognitive functions may diminish or even disappear.

It is also possible that receiving knowledge tailored exclusively to one's personal profile may hinder the ability to understand how others learn and think, posing the risk of turning individuals into isolated islands, lacking the skills needed for collective engagement.

5 D. Bit, S. Biswas, M. Nag, M. *The Impact of Artificial Intelligence in Educational System*, op. cit

6 A. M. Vieriu, G. Petrea, *The Impact of Artificial Intelligence (AI) on Students*, op. cit.

7 Ibidem.

8 W. Holms, I. Tuomi *State of the art and practice*, op. cit.

Personalized learning is regularly mentioned as a primary benefit[9]. However, to achieve effective personalization, an extensive amount of information about the student must be collected this gradual intrusion into personal privacy raises the concern of whether a human being, seen through this lens, becomes reduced to a dataset, with dignity and complexity flattened by the learning machine.

Information supplied to AI is done through human choice. The actual quality and level of objectivity in the content produced equates to the sum of diverse perspectives supplied to the program. Cultural, political, and even religious conventions will affect the emphasis towards one set of ideas or another. Moreover, AI systems can inadvertently perpetuate these existing biases which can lead to unequal educational experiences and outcomes for different groups of students. On the other hand, the flip side of information-bias is cultural uniformity: one global AI model providing the same set of ideas across a whole population risks the danger of homogenizing a cultural / philosophical spectrum of individual writers into a 'one-size-fits-all' outcome.

Outside of schools and education systems, AI-powered tools are given to children in many homes and this is unfortunately done, not necessarily out of thoughtful design, but out of convenience. Overworked teachers and busy caregivers may turn to "educational" technologies to fill time, manage behaviour, or to simulate learning without meaningful interaction. When this content is shallow, unverified, or overly simplified, it risks dulling curiosity instead of inspiring it. Passive exposure to such tools weakens not only critical thinking but attention as well and the drive to explore. Children may gradually disconnect from core cognitive behaviours – asking questions, making connections, or experimenting without immediate feedback.

Finally, there are differing theories around the nature and causes of addiction to screen technology. However, most agree on how widespread this addiction is becoming. It is beyond the scope of this article to do more than mention this potential addiction as a psychological and social phenomenon.

In summary AI can serve as a valuable support in education, but only when guided with care, critical oversight, and a commitment to real learning over quiet compliance[10].

Artificial intelligence and Creativity

If one begins with the premise that AI operates on the principles of logic and data then it is useful to look at some research which has shown that the creative impulse actually occurs in the mind before logic or linguistics come into play and manifests itself via emotions, intuitions, images and physical feelings[11].

The resulting ideas then translate into formal systems of communication: words, equations, pictures, music, or dance, but only after they are developed in pre-logical (analogously,

9 D. Bit, S. Biswas, M. Nag, M. *The Impact of Artificial Intelligence in Educational System*, op. cit.

10 A. M. Vieriu, G. Petrea, *The Impact of Artificial Intelligence (AI) on Students*, op. cit.

11 R. Root-Bernstein, *Sparks of genius: The thirteen thinking tools of creative people*, Houghton, Mifflin and Company 1999.

pre-artificially intelligent) forms. Regardless of how these many abstract details eventually take form - into paintings, poems, theories, formulas, and so on, the process by which ideas originate is universal to all persons with a potential towards genius, according to the authors. Learning to think creatively in one discipline therefore opens the door to understanding creative thinking in others.

Understanding the sources of creativity means understanding human consciousness. This understanding can vary in perspective from a purely computer-based model of the brain to questions of psychology and consciousness, inspiration, and even to mystical / spiritual experience. Is the source of creativity an internal manifestation or an external 'Muse'?. Being 'in the zone' or in the creative 'flow- state' are both important functions for human creativity / innovation, and these experiences are not fully understood by science. What has become clear is that accessing these flow states requires a contemplative, slow, and open state of being which is often counter to that of the state experienced when immersed in screen activity.

It is important to recognise and to be vigilant of the fact that AI is a supplementary tool which may *aid* creativity; it cannot be, in itself, creative. In music, literature, and visual art, AI is now able to compose and produce astonishingly sophisticated 'art' from very basic directions and inputs from the user. This may create an illusory sense of achievement which may mask the fact that the AI program has produced an amalgam of binary-based components to create a seductively professional artwork. Again, awareness and consciousness of the reality of this situation is crucial. Much like the paintbrush or the camera, AI is a more sophisticated tool for creative activity. As in the arts, the manipulation and transformation of materials into useful and/or beautiful products or artefacts is primal human activity. Not only are these pieces of work useful or beautiful but they have an inherently therapeutic and life affirming effect on the maker.

Human Teacher and AI teacher – can artificial intelligence replace the teacher?

The longest known research on quality of human life indicates that the common factor to living a good life, full of meaning, is maintaining healthy and authentic relationships[12]. The study underlines that general health lies not only in deep relationships, as between mother and child or husband and wife, but also through authentic casual, workplace relationships with colleagues. Our ability to build and sustain good, meaningful and true relationships is crucial for the survival of humankind[13].

AI has the power to contribute to SEL (social-emotional learning) but only if defined: AI teacher as a machine. If taken into consideration, skills and inner capacities such as resilience, critical thinking, mindfulness, and other SEL competencies, enable us to individualise the process of acquiring the aforementioned with the use of AI's empowered courses. As far as

12 K. Petrova, M. Nevarez, R. Waldinger, M. Schulz, *Emotional Support Across Adulthood: A 60-Year Study of Men's Social Networks*, "Psychology and Aging" 2024, 39(8).

13 Ibidem.

the Human teacher's role is concerned it will need to be directed more and more towards building and sustaining relationships with students and focused on organizing space for personal and social development[14]. This is the role of the teacher; to build this authentic bond with the student, empowering him/ her towards autonomous social interactions.

Ethically speaking, the Teacher is the one saying: "I can see you, I can see who you can become". This guidance is rooted in the humble perception of a human being's constant path towards lifelong learning.

A practical idea for AI in Education for the Future

The authors of this article are part of a group of educators, scientists and social activists representing various countries, such as Austria, Poland, Israel, the Czech Republic, Hungary, Scotland, England, Spain and India who together formed the Forum for the International Renewal of Education (FIRE) in 2017.

The FIRE initiative was established with specific goals in mind. These goals include fostering a learning environment characterized by a broader, multidimensional, empathic, and holistic approach. FIRE aims to discover globally applicable methods for educating children for future society, placing strong emphasis on 21st-century skills, values, and human capacities. The capacities highlighted include empathy, adaptability, compassion, mental health, and a sense of integrity. The FIRE team believe that the purpose of education is for the exploration of the young person's inner calling, the development of their absolutely individual potential and the preparation, not simply for the acquisition of qualifications, but for life at, say, 50 years old[15].

The FIRE team agreed that the emerging generation will require a broad set of skills, inner resources to navigate an increasingly complex and rapidly changing world. Key among these are adaptability, creativity, collaboration, and emotional intelligence capacities that enable individuals to manage change, generate innovative solutions, work effectively with others, and cultivate empathy in a digitally mediated environment. Equally essential are resilience, critical and independent thinking, and the ability to synthesize diverse areas of information, all of which support sound judgment and personal integrity. To foster well-being and sustained development, education must emphasize mindfulness, initiative, and a balanced approach that integrates intellectual, emotional and practical learning[16].

These ideas have already been implemented by thousands of educators, teachers, and institutions. This is where the FIRE's broad river takes its many sources from. FIRE's educational philosophy can be summed up by the ancient Delphic maxim: 'Know thyself' and with the famous quotation by Plutarch, who wrote, according to some translations: "The mind is not a vessel to be filled, but a fire to be kindled'[17].

14 S. Mitra, *The hole in the wall: self organising systems in education*, 2026 in: https://www.researchgate.net/publication/50993473 [Download: 5 May 2025].

15 FIRE Manifesto, 2017.

16 Ibidem

17 Ibidem.

There was a further development in the history of FIRE in 2025.The so called FIRE Foundation was established, with a board comprising Agata Hofman, Arjav Parikh, Csilla Fuszek, Krzysztof Zajaczkowski, Agnieszka Kosiak and Luis Pastor, and this foundation began informal collaboration with the Source of Wisdom (SoW) project. SoW aims to create an AI tool founded upon knowledge-based AI and rule-based AI, which is specified as a different type of AI compared to data-driven or trained AI like ChatGPT[18].

SoW functions as an Intelligent Tutoring System (ITS) designed specifically for students. It is metaphorically described as being of the "Netflix – type". The underlying technology for SoW is implemented by another entity, Profit Network. The system is populated with content derived from the core curriculum for students aged 10–14[19], and it also incorporates elements inspired by the FIRE Manifesto.

The FIRE team is committed to integrating core human values into the practical development and application of Artificial Intelligence in Education (AIED). Their approach centres on fostering human competencies that remain essential in an AI-empowered future, particularly those that highlight uniquely human strengths. Key areas of focus include expanding vocabulary in targeted domains, enhancing critical thinking, encouraging ethical decision-making, and nurturing artistic and hands-on abilities. Additionally, the team emphasizes the cultivation of emotional intelligence through practices such as gratitude, compassion, and empathy. In terms of personality development, the FIRE team seeks to support students in goal setting, building resilience, fostering a growth mindset[20], and developing confidence. This also involves recognizing and addressing mental health challenges, navigating toxic relationships, supporting others, and cultivating character strengths and emotional wisdom.

This approach involves working with two specific age groups: 10–12 and 13–14. A practical step is building a 6 week course on well-being, self-regulated learning, talent development and self-awareness, which could be implemented into AI's empowered application. This equates to an additional 60 games in SoW, each with 15 activities, totalling 900 activities. It represents almost one-fourth of the total activities within SoW AI tool. The team is also responsible for finding appropriate rules for the educational material, such as the proposed 15 minute rule to be interrupted by a mindful task such as a 30-second breathing activity.

Finally, the games touch upon the importance of stories, noting their significance in creativity, art, decision making, and more generally, the primal importance of story-telling in human civilisation.

These ideas mirror the team's belief that issues such as growth mindset, habit formation, gratitude and other competences should be of a primary focus in today's education and could be personalized with the use of AI. However, the general aim is, as previously stated:

18 W. Holms, I. Tuomi *State of the art and practice*, op. cit.

19 SoW 1.0, specifically, was to include 37 school subjects and to be designed for the four-year period covering ages 10 to 14 . It contains a substantial amount of content: 204 items multiplied by 15 activities each, totaling 3060 activities which include games, fun facts, and quizzes. SoW possesses both the benefits and disadvantages inherent to AI tutorials. It is intended for use in both in-school and out-of-school settings and was initially planned to be tested in three different countries.

20 On the basis of Carol S. Dweck: Mindset: *The New Psychology of Success*, Paperback 2007.

to build and sustain good, meaningful personal relationships, both generally and within the classroom with colleagues and human teachers. AI needs to be simply a springboard to healthy social interactions[21].

The FIRE initiative (partnered with the Source of Wisdom project) recognizes this delicate balance. Working with students aged 10-14, they are exploring how AI can support rather than replace the development of crucial human qualities such as empathy, resilience, and integrity.

Summary

As Gloviczki points out, the analyses of the relationship between education and AI all come to the point where it is necessary to formulate the knowledge, attitudes and values that will be needed in the schools of the future to meet all the challenges we have listed above[22]. It is essential to agree with the school's aims and objectives on the place of AI in education.

Unfortunately, the existing AI programmes are generally focused on knowledge transfer and competency development from the traditional school tasks, and rarely do we find educational AI programmes which aim e.g. at personal development and learning methodology etc.

Within the framework of the "Road to a better self" project, the tasks of the FIRE team are clearly defined. Their responsibilities include integrating human values into the educational approach compensating for the possible disadvantages identified with AI use, and compensating for the missing functions of education (specifically, socialization and subjectification) that AI systems like SoW might not fully address.

They are also tasked with finding the appropriate materials to feed the AI technology and finding appropriate rules for the educational material. A critical principle that must be kept in mind is that the school, the pedagogical work, and the user, must always have autonomous goals, with AI being solely a tool used to achieve these predefined goals. The primary autonomous goal of school and pedagogy is emphasized as the maintenance and development of the human person and community.

In a recent article, Kiss analyses in detail the ethical issues surrounding artificial intelligence. She divides the ethical issues into 4 groups, many of which are widely known[23], such as autonomy, which is the most critical capability for AI. In the case of a machine, autonomy basically means that it senses its environment, what decisions it makes, how it acts to achieve a certain goal.

The next critical question is the so-called "Responsible AI problem", i.e. who is responsible if the AI-controlled machine crashes? Who is responsible if the self-driving car causes an accident? Consider the human responsibility that both the autonomy and the responsible

21 A. M. Vieriu, G. Petrea, *The Impact of Artificial Intelligence (AI) on Students*, op. cit.

22 Gloviczky, *A holnapután iskolája, Felkészülés az emberi jövőre*, 2024.

23 O. Kiss, "AI and Its Philosophy – Parallel Stories", in: *Knowledge, Controversy, Virtuality: Studies in honour of László Ropolyi on his 75th birthday*, L'Harmattan, Hungarian Philosophical Socety, Budapest 2025.

AI problems could imply. Gloviczki calls it 'outright human experimentation' to place AI educational programs in front of children without serious control and testing.

The third ethical issue, which has already been touched upon, is ethical AI and AW, the so-called Artificial Wisdom. Here the basic problem is that AI learns from us, our habits, our opinions, our worldview, our judgements, and biases them because we ourselves are biased.

And lastly, there is the alignment problem that the FIRE team faces, as their work is mostly related to this. The issue of alignment is how to make the values represented by AI align with human values [24].This, at first glance seems straightforward, but its feasibility is very much in question. We are presented with a complex challenge purely because the values that AI should ideally represent are themselves not trivial. There are many differences in preferences among people, and stated preferences can sometimes differ from actual preferences[25].

We are also faced with the necessity for the development of safe machine learning algorithms. Furthermore, error is considered inevitable in technological systems. A fundamental question arises: how can the compass of core human values be monitored within AI systems?

In facing this problem of alignment, the FIRE team has specific responsibilities and tasks. It is essential for them to agree on the basic values they want to represent within the system. They must have the conviction that building ethical values into the technology / SoW is possible. And they must believe that this process can be monitored.

In conclusion, the document "Road to a better self" describes a deliberate project by the FIRE team. The aim is to ethically integrate a rule-based AI tutoring system (initially to be in SoW) into education, leveraging its capacity for qualification and individualized learning, while actively mitigating its disadvantages. A central focus is addressing the challenge of aligning AI values with human values by intentionally shaping competencies and supporting personality development in students, ensuring that AI remains a tool serving the autonomous goals of human development within the educational context.

24 Ibidem.

25 Ibidem.

Bibliography:

Bit D., Biswas S., Nag, M., *The Impact of Artificial Intelligence in Educational System*, "International Journal of Scientific Research in Science and Technology" 2024, Volume 11, Issue 4, p. 419–427 IJSRST2411424.pdf [Downloaded: 3 May 2025].

Vieriu A., M. Petrea, G., *The Impact of Artificial Intelligence (AI) on Students*, "Academic Development. Education Sciences" 2025, 15(3), p. 343. https://doi.org/10.3390/educsci15030343 [Downloaded: 22 April 2025].

Holms W., Tuomi I., *State of the art and practice in AI in education*, "Eur J Educ" 2022, 57: 542–570. https://onlinelibrary.wiley.com/doi/epdf/10.1111/ejed.12533 [Downloaded: 18 April 2025].

Gloviczky, *A holnapután iskolája, Felkészülés az emberi jövőre*, 2024.

Kiss O., "AI and Its Philosophy – Parallel Stories", in: Szívós, Mihály (szerk.) Szanto, Tibor R. (szerk.), *Knowledge, Controversy, Virtuality: Studies in honour of László Ropolyi on his 75th birthday*, L'Harmattan, Hungarian Philosophical Socety, Budapest 2025, 170 p.

WEF Future of Job Report: https://www.weforum.org/publications/the-future-of-jobs-report-2025/ [Downloaded: 15 January 2025].

DICASTERY FOR THE DOCTRINE OF THE FAITH and DICASTERY FOR CUTURE AND EDUCATION (2025): ANTIQUA ET NOVA *Note* on the Relationship BetweenArtificial Intelligence and Human Intelligence: https://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_ddf_doc_20250128_antiqua-et-nova_en.html [Downloaded: 3 May 2025].

U. S. Department of Education, Office of Educational Technology: *Artificial Intelligence and Future of Teaching and Learning: Insights and Recommendations,* Washington, DC, 2023. This report is available at: https://tech.ed.gov

Mitra S., *The hole in the wall: self organising systems in education* 2006: https://www.researchgate.net/publication/50993473 [Downloaded: 5 May 2025].

Qadir J., Engineering Education in the Era of ChatGPT: Promise and Pitfalls of Generative AI for Education 2022: https://www.researchgate.net/publication/366712815_Engineering_Education_in_the_Era_of_ChatGPT_Promise_and_Pitfalls_of_Generative_AI_for_Education [Downloaded: April 17 2025]. FIRE Manifesto (2017).

Petrova K., Nevarez M., Waldinger R., Schulz M., *Emotional Support Across Adulthood: A 60-Year Study of Men's Social Networks*, "Psychology and Aing" 2024, No. 39(8), p. 933–945.

Root-Bernstein R., Root-Bernstein M., *Sparks of genius: The thirteen thinking tools of creative people*, Houghton, Mifflin and Company 1999.

Briedis M., Navarro M., *Conceptual problems with disembodied cognition in learning environment(s) and the alternative of embodied creativity*, "Creativity Studies" 2024, 17(1), p. 244–253; https://doi.org/10.3846/cs.2024.20755.

CSILLA FUSZEK: PhD in social sciences, Chair of ETNS https://etsn.eu/ – a network of over 500 organizations across Europe. Since 2012, responsible for gathering expert practices in Europe and beyond. Member of the program board of the FIRE foundation. E-mail: fuszekcs@gmail.com

KRZYSZTOF ZAJĄCZKOWSKI: Education expert with 35 years of experience, has given talks in Taiwan, Mexico, New Zealand, Poland, and the UK. Former Director of Education at Drumduan School in Scotland. In 2015, received an audience with Her Majesty the Queen for contributions to educational innovation. Member of the program board of the FIRE foundation. Articles on his work have been published internationally. E-mail: krzys.zed@gmail.com

ARJAV PARIKH: Conducted workshops for students across various schools under Intel Education India (reaching 12,000–15,000 children in two years). Member of the program board of the FIRE foundation. Co-founder of a stealth AI startup. E-mail: arjav.work@gmail.com

AGNIESZKA KOSIAK: Project Manager at DACSYSTEM, involved in: Spichlerz (SpeakLeash.org) – a community developing the Polish LLM Bielik, and GRAI – the AI working group at the Ministry of Digital Affairs (AI Data and AI Education & Awareness sections). Member of the program board of the FIRE foundation. E-mail: a.kosiak@gmail.com

AGATA HOFMAN: PhD in humanities, founder of the Polish Children's Academy, awarded the 2013 Science Popularizer prize by MNISW and PAP. Director of education at GKS Gedania 1922. Since 2016, she has led international projects under Erasmus+ and in cooperation with organizations such as UNICEF Hungary, the Polish Patent Office, and NASA scientists. President of FIRE foundation. E-mail: agatka.hofman@gmail.com

LUIS PASTOR – Responsible in the project for language guidlines for the course for children aged 10–14.
Professor at Universidad Rey Juan Carlos, specializes in AI in education for neurodiverse individuals, Erasmus+ project coordinator, member of the program board of the FIRE foundation. https://www.researchgate.net/profile/Luis-Pastor-2. E-mail: luis.pastor@urjc.es