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Recommendations of the AEGEE-Europe to the European Parliament based on results after the 10th edition of the project "Europe on Track"

Lack of Public Education and Awareness on Al Tools and Al generated content among people enrolled in High Schools and Universities courses

The pervasive influence of Artificial Intelligence (AI) is transforming numerous domains, and the education sector is no less susceptible to this transformative force. While AI presents exciting possibilities for personalised learning experiences and enhanced educational outcomes, its integration also necessitates a critical examination of the potential challenges it introduces. This paper delves into three key areas of concern:

- 1. **Limited understanding of Al:** Students and teachers may not grasp the true potential of Al tools or be overly reliant on them, hindering critical thinking and problem-solving skills.
- 2. **Unidentified bias in Al algorithms:** Al algorithms can perpetuate biases if trained on biassed data. Students and teachers may be unaware of these biases and trust Al outputs too readily.
- 3. **Difficulty in understanding Al-generated content:** People may struggle to distinguish between human-written and Al-generated text, potentially impacting source evaluation and plagiarism detection.

Our proposed solutions

1. Education and Training:

- a. Support the development of educational resources on AI for students and teachers to foster their understanding of AI principles, applications and ethical considerations to promote responsible AI use.
- b. Encourage the member states to integrate digital literacy courses into curriculum to equip students with skills to evaluate online information and distinguish AI generated content from other content.

2. Policy and Regulation:

- a. Increase the number of schools and universities with regulations on Al use.
- b. Establish data governance standards to ensure fairness and privacy in AI training data.

3. Research and Development:

- a. Fund research into ethical AI development and bias mitigation techniques.
- b. Develop an EU educational platform providing information on AI tools, responsible use guidelines, and resources for educators.

Background

The responsible use of AI in education has the power to reshape learning for the better. By acknowledging and addressing the aforementioned challenges, we can ensure that AI becomes a tool for educational equity and empowerment, not a source of new disparities. This paper aims to initiate a crucial dialogue among educators, policymakers, and technology developers, promoting informed approaches to AI implementation that prioritise responsible use and ethical considerations. By investing in education and awareness campaigns, we can empower future generations to leverage the power of AI for knowledge creation and positive societal impact.

Ultimately, navigating the integration of AI in education requires a nuanced approach. We must embrace its potential for personalised learning and enhanced educational outcomes while vigilantly mitigating the risks of overreliance, bias, and academic integrity concerns. This paper serves as a springboard for further discussion and exploration, ensuring that AI serves as a force for positive transformation within the educational system.

Navigating Artificial Intelligence in Education

Artificial intelligence presents a way to transform education, both for students and educators. All systems could for example improve student outcomes by personalising learning experiences, identifying knowledge gaps and recommend targeted learning resources. This personalised approach fosters deeper understanding and engagement, catering to diverse learning styles and maximising the potential of each student.

It also has the potential to help educators by streamlining administrative tasks like grading, or analysing student data. This could free up valuable teacher time for more strategic endeavours like curriculum development and fostering meaningful student interactions.

Challenges Requiring Scrutiny

Despite its undeniable potential, the integration of AI in education is not without its challenges. A significant concern lies in the limited understanding of AI capabilities and limitations. Students and educators alike may not fully grasp the true potential of these tools, leading to overreliance that hinders the development of critical thinking and problem-solving skills – cornerstones of lifelong learning.

Furthermore, Al algorithms are susceptible to perpetuating biases if trained on data sets that are themselves skewed. This raises serious ethical concerns, as biassed Al tools can exacerbate educational inequalities and lead to discriminatory outcomes for certain student populations. The ability to distinguish between human-generated content and Al-generated content presents another challenge, potentially compromising academic integrity through plagiarism.

Current state of affairs

The current state of affairs is that not many educational institutions have policies regulating the use of AI by students and teachers. A recent UNESCO global survey [1] of over 450 schools and universities showed that less than 10% of them had institutional policies and/or formal guidance concerning the use of generative AI applications, largely due to the absence of national regulations. The survey shows the need for implementing such guidance and stresses the importance to implement the recommendations presented in this paper.

What is more, in the survey [4] of the Council of Europe on the State of Artificial Intelligence and Education Across Europe, only 4 out of 23 member states that responded stated that they had policies and regulations in place for the use of AI systems in education. The low number of those countries also indicates the importance of broadening the scope of AI within the education systems of EU member states.

In September 2022 the Commission published Ethical Guidelines on the Use of Artificial Intelligence (AI) and data in teaching and learning for teachers [2]. This was an important step in providing schools with guidelines and tools that they can implement the use of AI in education.

It is also important to mention that policymakers focus more on educating the workforce and the AI experts rather than students and teachers within educational institutions of the EU countries. In Schiff's review on 24 AI policy strategies [3] focusing on the role of education in global AI policy discourse, it was found that policymakers view education largely as an instrumental tool to support workforce development and training of AI experts. The article suggests that if such a trend continues, policymakers may fail to realise AI in education's transformative potential and may fail to sufficiently fund, regulate, and consider AI in education's ethical implications.

Policy proposals

As young Europeans we are concerned about the development of the new digital world and how it will affect our lives. Not having a proper knowledge of the possibilities, limitations and risks of Al tools, might generate several problems among the populations of different age, genders and nationalities. According to the data collected during our journey and from different sources, we came up with several proposals to tackle this problem.

Enhancing AI Literacy:

- Educational Infrastructure: Establish regulations and guidelines within EU schools and universities for the responsible use of AI tools. This framework ensures safe and ethical integration of AI into the educational landscape.
- Dedicated EU Platform: Develop a centralised EU educational platform providing easily accessible information about AI. This resource will encompass:
- Responsible AI Use: Guidelines for ethical and responsible utilisation of AI tools.
- Available Tools: A comprehensive list of readily available AI tools across various sectors.
- Teacher and Staff Resources: Specific guidelines and best practices for educators and university personnel to effectively integrate Al into their teaching methods.
- Curriculum Integration: Encourage and fund the implementation of digital literacy courses for both high school and university students. These courses will equip them with the necessary skills to:
 - Identify Al-Generated Content: Recognize and differentiate between human-created and Al-generated content.
 - Evaluate Information Credibility: Effectively assess the credibility and potential biases of information encountered online, regardless of its source.
 - Utilise Al Responsibly: Develop an understanding of responsible Al use and its implications for various aspects of society.
- Faculty Development: Offer training programs for teachers and university staff to enhance their competence in using and integrating AI tools responsibly within their curriculum.
- Open Discussion Forums: Facilitate regular discussions and knowledge-sharing sessions between educational institutions, educators, and students. This will foster a collaborative environment for exploring responsible AI practices.

Mitigating Algorithmic Bias:

- Data Governance Standards: Establish robust data governance standards across the EU. These standards will ensure:
 - Data Quality: The data used to train AI systems is accurate, reliable, and representative of the intended use case.
 - Fairness: Minimise algorithmic bias by promoting fairness and non-discrimination in data collection and utilisation processes.

- Data Privacy: Uphold and enforce strong data privacy regulations to protect the privacy of individuals whose data is used to train Al systems.
- Funding Ethical AI Research: Allocate dedicated funding for research initiatives focused on developing ethical AI frameworks, bias mitigation techniques, and responsible AI application across various sectors.

Combating the Misidentification of Al-Generated Content:

- Accessible Detection Tools: Support the development and implementation of user-friendly and readily available tools on digital platforms such as social media, blogs, and online newspapers. These tools will enable users to efficiently identify and verify the source of content (human-generated or Al-generated).
- Transparency requirements: Require large online platforms to label content which is Al generated.

Promoting Critical Thinking Skills:

- Incorporating Critical Analysis: Encourage the integration of critical thinking exercises into educational activities that involve AI tools. These exercises should develop the ability to critically examine information generated by AI, identify potential biases, and compare it to information from reliable, alternative sources.
- Questioning Al Outputs: Developing Focus on Problem-Solving: Shifting the emphasis from Al providing instant answers to encouraging students to develop problem-solving skills. This can be achieved through activities that require students to formulate strategies, analyse information, and reach well-founded conclusions independently.

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