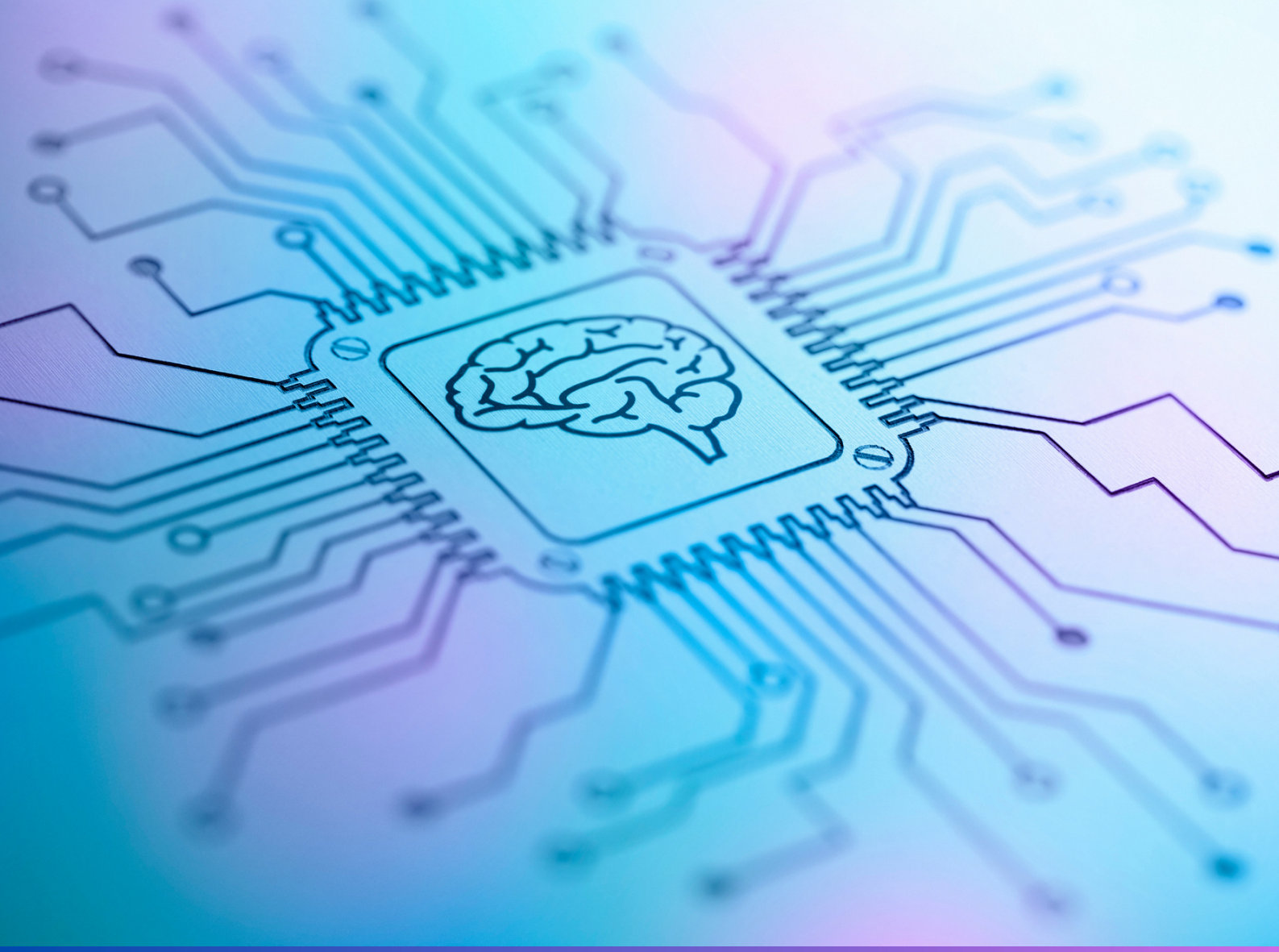

2023

GUIDEBOOK FOR STUDENT UNIONS

AI IN EDUCATION

GLOBAL STUDENT FORUM

Guidebook for Student Unions: AI in Education

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THE URGENT NEED FOR STUDENT VOICES IN THE AI DEBATE

Today, student unions have a unique opportunity to champion the ethical and transparent use of AI in education. The current state of AI in education is expanding rapidly, and it has the potential to revolutionize the way we learn and teach. However, it also poses several challenges and concerns that must be addressed.

The public debate on the appropriate use and development of AI is still ongoing, and we urge student unions to be alert and engage in discussions to bring the student perspective to this soon-to-be inescapable domain.

With the rapid developments in AI, the need for students as leaders of tomorrow, to speak up and engage in the AI debate, has never been greater.

WHY DOES AI MATTER?

Artificial intelligence (AI) is a growing part of the world today, bringing both opportunities and challenges. This Guidebook examines the current state of AI in education, discusses the challenges and concerns that arise with the use of AI, and provides policy recommendations for student unions to promote the ethical and transparent use of AI in education.

The importance of addressing the impact of AI on education lies in its potential to revolutionize the way we learn and teach, as well as its potential to exacerbate existing inequalities and biases in the education system.

For example, AI could reinforce systemic biases by using data that reflects historical inequalities, or it could take the place of human educators and exacerbate educational disparities by offering varying levels of support to different student groups.

However, there have been many occasions throughout history, where technological developments have been sensationalised as resulting in biases and disparities. While disparities must be taken into account, technologies can create disruption within educational contexts.

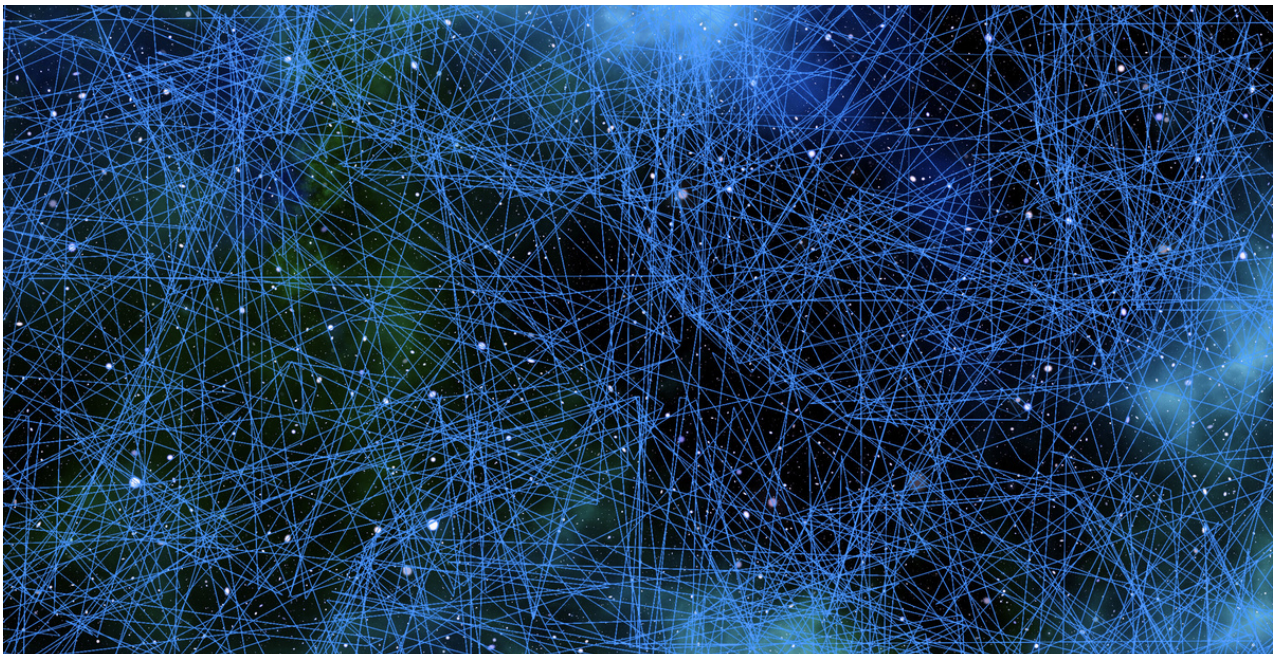
The scientific calculator was one such example, where its use was considered the end of mathematics for some period, prior to it being adopted into the school curriculum and assessment changed accordingly to support its use.

The purpose of this Guidebook is to provide student unions with recommendations on how to promote the ethical and transparent use of AI in education. By doing so, student unions can play a key role in shaping the deployment of AI in education to ensure that it benefits all students and contributes to a more equitable and inclusive education system.

WHAT IS AI?

AI can be defined as the science and engineering of making machines perform intelligent tasks and make decisions without explicit human intervention, with a focus on learning and adaptation to improve their performance. AI includes various techniques, such as machine learning, deep learning, and reinforcement learning, and can be categorized into narrow AI or Artificial General Intelligence (AGI) depending on their capabilities. Human-Centered Artificial Intelligence is a specific field of AI that focuses on augmenting human abilities and addressing societal needs.

- Christopher Manning, Stanford Institute for Human-Centered Artificial Intelligence



CHALLENGES & CONCERNS

As we navigate the transformative potential of AI in education, it's essential to confront the myriad challenges and concerns that accompany this technological revolution. While AI offers remarkable opportunities for personalized learning and operational efficiency, it also surfaces ethical dilemmas and practical hurdles that must be thoughtfully addressed.

Ethical considerations

AI in education, while promising, carries ethical concerns, especially in the context of capitalism and austerity politics. The possibility of AI replacing teachers could lead to job loss and dehumanize education. AI's role in critical decisions like university admissions or scholarship eligibility raises questions of equity and accessibility. Therefore, there is a need to foster robust debates on AI's ethics, truthfulness, and loyalty, addressing potential misinformation and striving for transparency, accountability, and inclusivity in AI use.

Bias and fairness

AI algorithms can be biased if they are trained on biased data or if they incorporate implicit biases from their developers. This could lead to unfair treatment of specific students. For example, an AI system that grades student essays may be biased against non-native English speakers or students with non-standard dialects.

Privacy concerns

AI in education may involve the collection and use of large amounts of student data, raising questions about data privacy, security, and ownership.

Digital safety must extend to the growing presence of biometrics and biodata collection in leisure and educational environments online. As digital student identification cards, e-writing tools, AI educational tools, online proctoring, and various other technologies proliferate, they collect diverse data, such as fingerprints, behavioral tracking, and even data on skin color, age, and gender. This contributes to a data footprint that can be targeted, potentially posing risks to young women and girls, and marginalized groups.

Impact on teachers, and students

Students may harbor concerns about the fairness of AI systems in assessment, and learning, as well as the use of their personal data, while teachers may have pedagogical concerns. It is vital to address these concerns by prioritizing transparency in AI applications, ensuring that AI not only enhances educational outcomes but also respects the rights and interests of all stakeholders.

Traditional learning assessment

Assessment is often based on testing a student's ability to recall or use facts or systems of knowledge they have acquired. With AI being incorporated into various systems, traditional learning assessment might no longer be adequate to test students' skills.

Dependence on technology

With AI taking on a greater role in education, there is a risk of overdependence on technology. This could lead to a loss of critical thinking and problem-solving skills that are developed through traditional learning methods.

Cost

AI-powered education tools can be expensive to develop and implement, which may limit their access to schools and students with limited resources. At the same time, standardised AI systems can become inadequate quick-fix solutions for underfunded institutions leading to an increased digital divide.

Intellectual property

As AI becomes more prevalent in education, there may be challenges around intellectual property rights and ownership of materials created or modified by AI.

Lack of regulation

The rapid development and adoption of AI-powered education tools have outpaced the ability of regulatory bodies to keep up with the technology. As a result, there is a risk that AI-powered education tools may be deployed without adequate oversight or evaluation of their effectiveness, safety, and ethical implications.

Lack of human connection

AI in education may lead to less face-to-face interaction between students and teachers, and dehumanize the teacher-student relationship.

Accountability

There is a risk that AI may be used to shift responsibility away from human educators and administrators, making it more difficult to hold individuals and institutions accountable for educational or administrative outcomes. This also poses a challenge for quality assurance systems and questions about liability.

Unintended consequences

There may be unintended consequences of using AI in education that are difficult to predict, such as changes in student behaviour or social dynamics in the classroom.

RECOMMENDATIONS

In this section of our guidebook, we distil insights gathered from the exploration of AI's potential, challenges, and concerns into actionable recommendations. These suggestions are designed to help student unions navigate the integration of AI into educational contexts with ethical responsibility and practical efficacy.

Advocate for transparent and ethical use of AI in education

Student unions can play a key role in advocating for the ethical and transparent use of AI in education. This can be done by advocating for policies that promote transparency in the use of AI, such as requirements for clear explanations of how AI algorithms are making decisions and collecting data.

Promote privacy and data ownership

Student unions can advocate for policies that protect student data privacy, security, and ownership. One approach can be policies that ensure student data is only used for educational purposes and that students have control over their data.

Encourage diversity and inclusivity in AI development

Student unions can encourage the development of AI that is inclusive and diverse by advocating for the collection of diverse data and diverse representation in the development of AI systems. If successful, AI systems will be less biased against specific student groups and promote equity in education.

Support teacher training on AI

Student unions can advocate for the inclusion of AI education in teacher training programs. This will make teachers better prepared to use and interact with AI systems and raise awareness of the potential benefits and challenges associated with AI in education.

Advocate for the protection of human connection and critical thinking

Student unions can advocate for policies that ensure that AI is not used to replace human interaction and critical thinking skills in education. This can involve promoting face-to-face interaction between students and teachers and the value of traditional learning methods.

Promote awareness among students

Student unions hold a pivotal role in fostering an informed and engaged student body. Part of this responsibility involves promoting awareness of emergent technologies like AI. Student unions can organize workshops, discussions, or information sessions to educate students on the potential benefits and drawbacks of AI in education. Topics might include how AI can personalize learning or improve accessibility, as well as potential risks such as data privacy or algorithmic bias. By shedding light on the ethical and social implications of AI, student unions can empower their peers to be thoughtful, informed participants in the digital age.

Promote affordability and accessibility

Student unions can advocate for policies that promote the affordability and accessibility of AI-powered education tools. Among the options are policies that promote the development and distribution of low-cost or free AI-powered education tools for students and schools with limited resources.

Foster partnerships with industry and academia

Student unions can collaborate with AI companies and academic institutions to create opportunities for students to learn about AI and develop their skills through internships, mentorships, and joint research projects.

Encourage investment in research and evaluation

To ensure that AI-powered education tools are deployed with appropriate oversight, student unions can advocate for investment in research and evaluation of AI-powered education tools making them more effective, safe, and ethical.

Create student-led AI initiatives

Student unions can take the lead in developing AI-based projects and initiatives that address social issues and promote sustainable development. One approach is to partner with AI companies, academic institutions, and civil society organizations to leverage the power of AI to solve real-world problems.

Advocacy for AI Benefits to Marginalized Students

Student unions can play a role in advocating for the implementation of AI technologies to assist marginalized students, including refugees, minorities, and students with disabilities. By promoting AI's capacity for personalized educational solutions, such as language translation tools and adaptive learning materials, student unions can help ensure that these students receive an inclusive, quality education that caters to their specific needs.

Monitor the use and implementation of AI

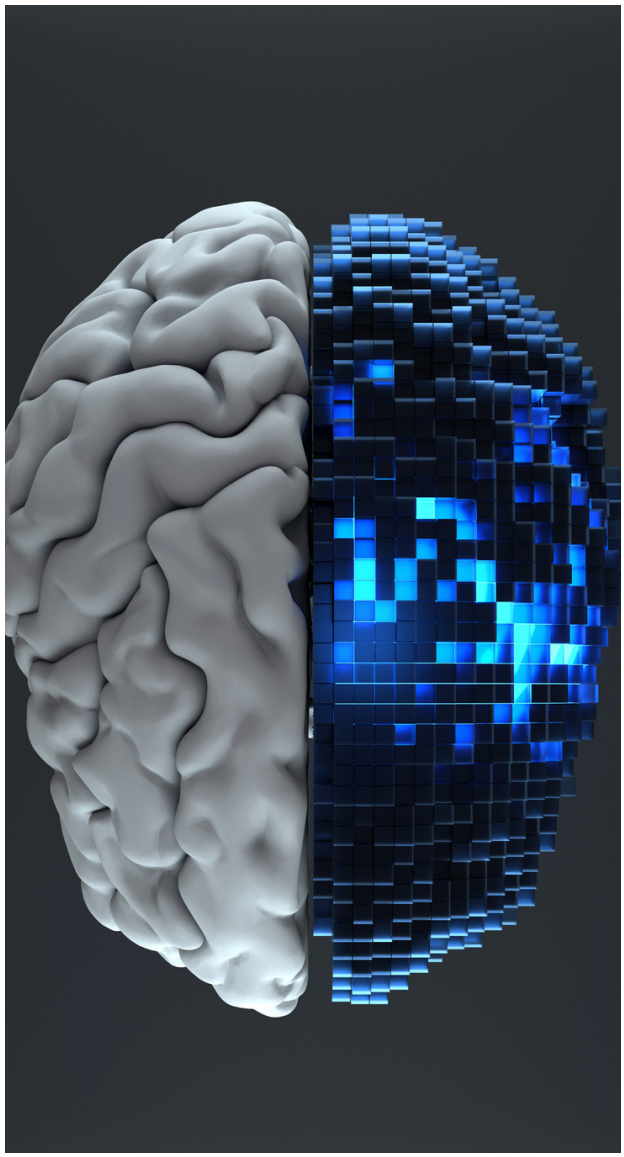
Student unions serve as watchdogs in the educational ecosystem, and this role extends to the domain of AI implementation. They can monitor the use and application of AI within their educational settings, ensuring it aligns with ethical standards and contributes positively to the learning environment. Should they observe any unethical or unfair practices, such as bias in AI algorithms or misuse of student data, student unions can raise these concerns to the appropriate bodies, thereby safeguarding the interests and rights of their fellow students.

Championing AI for Humanitarian and Educational Impact

Student unions can also leverage their influence to champion the integration of AI within CSOs and NGOs working in the humanitarian and educational sectors. By underscoring how AI can enhance data-driven decision-making and personalized learning, they can encourage these organizations to adopt AI, ultimately leading to more effective and efficient operations. This advocacy can contribute to transforming the educational landscape, fostering a more inclusive and impactful learning environment for students all over the world.

SUMMARY

The recommendations for the use of AI in education are multi-faceted and include advocating for transparent and ethical use of AI, encouraging diversity and inclusivity in AI development, promoting privacy and data ownership, supporting teacher training on AI, investing in research and evaluation, advocating for the protection of human connection and critical thinking, promoting affordability and accessibility, raising awareness among students, monitoring the use and implementation of AI, creating student-led AI initiatives, and fostering partnerships with industry and academia. These recommendations aim to ensure that AI-powered education tools are developed, implemented, and utilised in a manner that is equitable, effective, safe, and ethical, while also promoting innovation.



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