If AI becomes key tool in edu, access has to be equal

SAM ILLINGWORTH

The pandemic forced many educational institutions to move to online learning. Could the rise of chatbots, including OpenAI's ChatGPT and Google's Bard, now further improve the accessibility of learning and make education more attainable for everyone?

Chatbots are computer programmes that use artificial intelligence to simulate conversation with human users. They work by analysing the context of a conversation and generating responses they believe to be relevant. They have been trained on massive data sets of human language, allowing them to generate responses to a wide range of questions.

Chatbots like ChatGPT and Bard can be used in a variety of educational settings, from primary and secondary schools to universities and adult education courses. One of their greatest strengths is in promoting individualised learning.

For example, they can support students in research and writing tasks, while also promoting the development of critical thinking and problem-solving abilities. They can generate text summaries and outlines, aiding with comprehension and organising thoughts for writing. They can also provide students with resources and information about specific topics, highlighting unexplored areas and current research topics, thus enhancing research skills and encouraging agency in learning.

Similarly, research has shown that chatbots can help to maintain students' motivation and involvement, in part by promoting self-directed learning and autonomy. This means they can potentially be used to help address low engagement in education that has been made worse by Covid-19 and the move to remote online learning.

DIGITAL POVERTY

While chatbots have the potential to enhance learning, it's important to acknowledge the dangers they might also pose in relation to digital poverty and the digital divide. Students who lack reliable internet access or other resources needed to participate in online classes may not have access to chatbots or other digital learning tools.

Results from the 2021 census show that in January to February 2020, 96 per cent of households in Great Britain had internet access, up from 93 per cent in 2019 and 57 per cent in 2006 when comparable records began. However, these statistics do not tell the whole story.

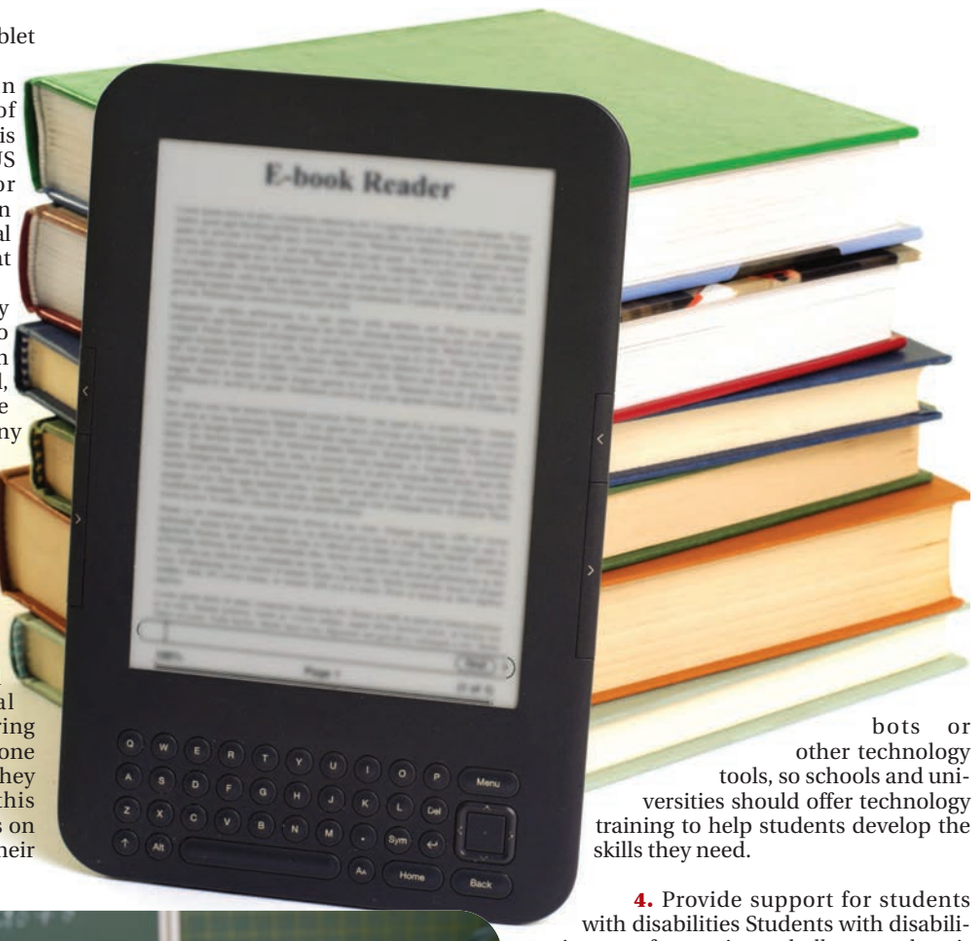
A 2020 Ofcom Survey found that before COVID-19, 9% of UK households with children lacked a laptop, desktop or tablet, and 4 per cent had only smartphone access. A higher percentage of children in lower-income households were affected by lack of access to digital devices. Specifically, 21 per cent of households where the main earner held a semi-skilled or unskilled occupation had no access to a laptop, desktop or tablet for their children's education at home.

This situation is clearly worse in countries where access to any form of internet provision is much lower than it is in the UK. Recent statistics from the US Central Intelligence Agency (CIA) for example, highlight that in many African countries, less than 10 per cent of the total population has access to the internet at any speed.

Likewise, while ChatGPT is a publicly available tool that users do not need to pay to use, there is a paid version which unlocks privileged access. Similarly Bard, also free to use, is currently only available in certain countries. Put simply, like any other technology, chatbots have the potential to worsen pre-existing inequalities if they are not implemented carefully.

FIXING THE PROBLEM

To address this, educational institutions must take proactive measures to ensure that all students have equal access to chatbots and other digital resources. Another challenge is ensuring that students understand that not everyone has the same access to digital tools as they do. Educators can help to promote this understanding by incorporating lessons on digital poverty and equal access into their curriculum.



Here are five tips for educators to ensure equity in the use of chatbots in educational settings:

1. Provide equal access to chatbots: Educational institutions should ensure that all students have the same access to digital resources by providing loaner laptops, offering free or discounted internet access, or providing offline options for students with limited internet access.

2. Partner with community organizations: Universities and schools can link up with community organisations that provide internet access or lend computers to students in need.

3. Offer technology training: Some students may not be familiar with using chatbots or other technology tools, so schools and universities should offer technology training to help students develop the skills they need.

4. Provide support for students with disabilities Students with disabilities may face unique challenges when it comes to accessing and using chatbots. For instance, visually impaired students may face difficulties reading chatbot text, while students with cognitive disabilities may require additional support to understand and use chatbots effectively. Educators should ensure support is available for students who require extra help.

5. Raise awareness of digital equity: Educators can also help ensure equity in the use of chatbots by educating students to understand that not everyone has the same access and privileges in a digital setting. By encouraging empathy and awareness of digital poverty, students can learn to be mindful of their peers who may face challenges in accessing and using chatbots. This can be done through class discussions, assignments and activities that encourage students to think critically about digital equity and social justice.

Chatbots have the potential to revolutionise learning. However, educational institutions must address the potential dangers posed by chatbots with regards to further deepening the digital divide, and instead foster a culture of empathy and understanding for those who need training and supported access to the technology.

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Marginalized women get scope to display their skills

TARUN GOSWAMI

For the first time in its history a two-day fair of handicrafts was held by mothers representing marginal groups at Chandernagore College on 19-20 May, which evoked great response among the teachers and students of the college as well the people staying in the neighbourhood. There were also many visitors paying a visit to the 'mini Europe' on weekends.

The fair titled 'Disha Mela' was organized jointly by the NSS unit of the college and Sangbed Chandannagar, a well-known NGO. The aim behind holding the fair was to be entrepreneurship support and livelihood generation to the marginalized women of Purashree, Chandannagar railway tracks.

Interestingly, all the items produced by the exhibitors were sold out and many late comers had to go back empty handed.

A survey conducted by the NSS members of the college and their counterparts in Sangbed found that the main impediment faced by the marginalized women to become economically self-reliant was not skill but the lack of funds which prevented them from buy raw materials from the market.

The NSS members also found that the women were unaware of various schemes offered by the government and soft loans which they are entitled to.

To address the issues, the NSS members of the college arrange to assist the marginalized women with financial support to buy the raw materials. Also, the participants got an opportunity to talk to the experienced teachers from the college and senior government officials about various facilities, both financial and others, which they could avail of.

In the past few months, discussions with the industries were also held by every department of the college. They were addressed by experts in this field and during discussion, the topic of financial self-reliance came up. The NSS members got inspiration from the discussions which had helped them to organize the fair and ensure that the exhibitors got a chance to become self-reliant.

The items exhibited at the fair included handbags, made of cloth, wool and jute, door mats, items of home decorations among others. Mouth-watering pickles and naru (homemade sweet) were star attractions along with handmade muri (puffed rice).

The whole campus turned into a festive mood with hundreds of people visiting the college campus as entry to the fair was free. The visitors got an opportunity to talk to the women who, in turn, were very happy to come to a heritage college, a long cherished dream for many of them. With the college lights turned on, the festivities continued till evening.

The NSS students of the college are very active. The college has adopted some schools run by the Chandannagar Municipal Corporation to provide best primary education to the students by the NSS members. Senior teachers to the college have mentored the students who are all rostered. The college authorities have made arrangements to pay pocket money to the NSS members doing the coaching.

For Professor Debashis Sarkar, principal of the college, it was a pleasant experience. "It was a dream come true. I thank teachers of the college teaching political science and philosophy, who took the real trouble of training the NSS students. The students got an opportunity to come in contact with marginalized people directly and this will help them in future," he said.

PLUS POINTS

Applications for UG courses

BML Munjal University continues to invite applications for its undergraduate programmes for the class of 2023. The university's focus on using a holistic approach to evaluate students for each of its undergraduate programmes has created an ecosystem that trains students with an interdisciplinary approach.

BMU is committed to providing a practical approach to higher education, dedicating nearly 45 per cent of its time to hands-on learning. The university through its different schools offers integrated and interdisciplinary, problem-solving approaches that prepares students for the complex and diverse challenges of the modern world.

The university offers undergraduate programmes such as BTech, BBA, BA (hons) liberal arts, BBA LLB (hons), BA LLB (hons), BCom (hons) and BBA-MBA integrated. The eligibility criteria for admission to undergraduate programmes require successful completion of Class 12 or equivalent, as well as meeting the university admissions criteria mentioned on the website www.bmu.edu.in. Scores in entrance tests like JEE (Main) and LSAT & CLAT apply for the BTech and Integrated five-year programmes in law, respectively, and students may also appear for the BMU-SAT, BMU's entrance test. The university also considers CUET (UG) for admissions. BMU offers up to 100 per cent UG scholarships to meritorious students.

Techno India University talk show

Techno India Group organized a seminar featuring Professor Alex Hankey on "A Survey of Current Understanding of the Field of Science and Religion" for the students. The seminar began with a welcome address by vice-chancellor, Prof Gautam Sengupta followed by felicitation of the guests by Prof Manoshi Roychowdhury, co-chairperson, Techno India Group & director, Dr Rina Palladhi.

Prof Hankey's speech was highly enriching and enlightened the faculties and students. He indicated which field of modern science can bridge the gap to religion leading to harmonious, peaceful life there by bringing fulfillment to one's goals and aspirations.

The session ended with a vote of thanks by CEO & director Prof Sujoy Biswas. The seminar was moderated by Dr Rupa Mukherjee.

Biochemical engineering course

The University of Sheffield, UK is inviting applications for its MSc biochemical engineering with industrial management course starting in September 2023.

This course blends biochemical engineering with business management to prepare you for a career in biopharmaceuticals or industrial biotechnology.

Bioscience-based industries represent a new frontier for chemical engineering where management skills play a vital role in practice. Biochemical engineering plays a central role in the manufacturing of bio-products with impact in health, food and energy sectors.

This MSc provides a unique blend of biochemical engineering and business management to meet the growing demand of appropriately trained graduates in industrial biotechnology.

The course is ideal for those science and engineering graduates who want to broaden their skills into areas that will complement their existing expertise, making them an attractive employee within industry.