

The children's enthusiasm provided DSE with further motivation to continue to create new learning materials, especially considering the need to address concerns around safety and security in a proactive manner which promotes children's agency. With popular media often promoting feelings of worry around uses of AI, Children's Parliament have been trying to find a balance when introducing children to varying AI systems by giving space for children to see both pros and cons but also introducing children to systems that are actively aiming to improve their lives.

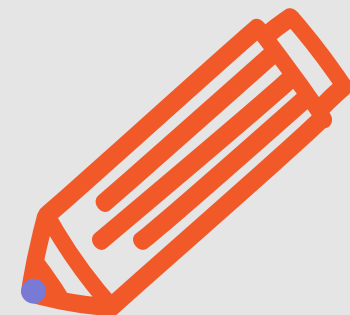
“This workshop encouraged us to continue to develop learning materials that support young learners to understand how AI apps and tools work, and how they can be used in ways that help us, not harm us.”

Craig Steele



3.

AI in Education Edinburgh



What we did

In Edinburgh, the Members of Children's Parliament visited the University of Edinburgh to work with our partners from the Centre for Research in Digital Education who have research interests in participatory design on children's human rights and AI. The activities undertaken invited the children to develop ideas for AI systems that could support both children's rights and learning in the future, as well as gathering their views on a range of possible applications of AI in the classroom.

The following day, Children's Parliament collaborated with Science Ceilidh to explore the children's ideas around the further use of AI in education, with a focus on themes of inclusion in school and the impact of AI on the role of the teacher.

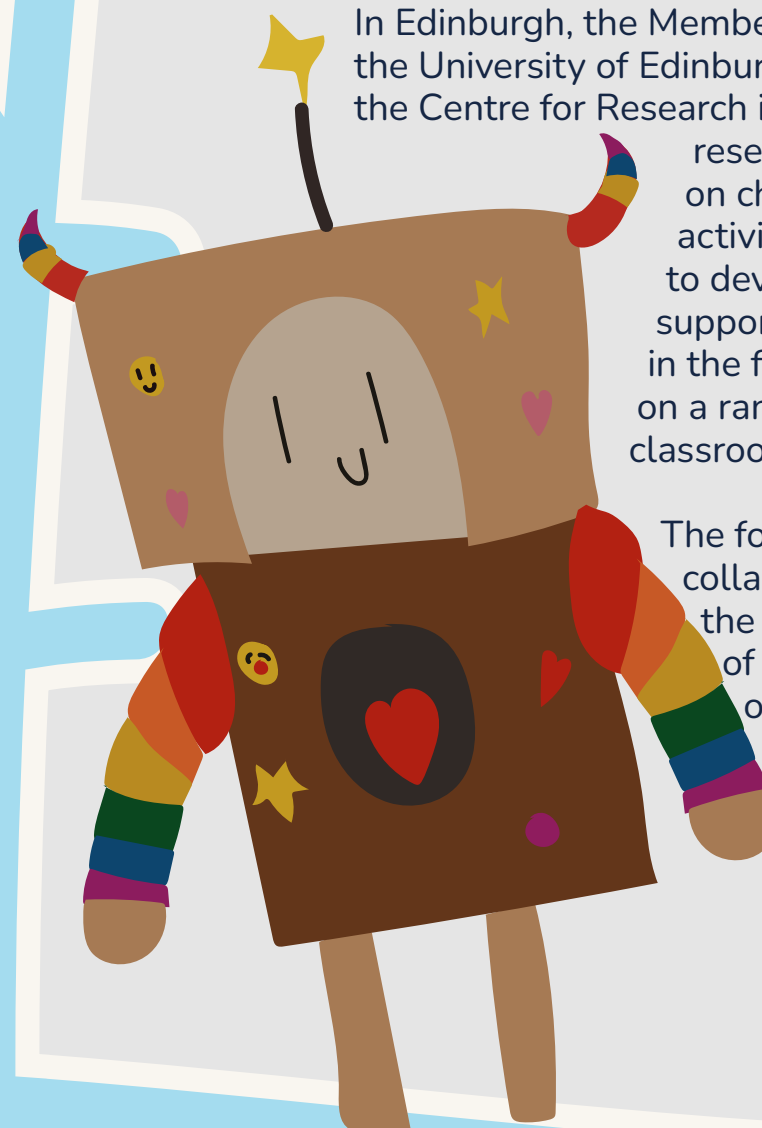


Image (opposite): Box construction.

Image (in box): The Science Ceilidh play for Members of Children's Parliament.

What we did

“AI can be good and bad in school, so don't always trust it.”

Member of Children's Parliament, Edinburgh

At Edinburgh University, the children were asked to imagine AI systems and tools which could support children's learning and their human rights 100 years from now and were set a design challenge – to create model 'prototypes' out of craft materials. One key theme that emerged from the design process was the children's focus on care and support – many children designed AI systems that provided emotional or mental health assistance, as well as giving thought to differences in learning styles and the impact of factors like language and neurodiversity in learning.

“Jimmy [the AI emotion robot designed by the Members of Children's Parliament] helps children's rights because it helps children not to be worried and not feel like they've got a lot of pressure on them, like exams.”

Member of Children's Parliament, Edinburgh

“If they're like nervous or, like, a bit upset or that, they can use it [AI] to just take all of that away.”

Member of Children's Parliament, Edinburgh

Members of Children's Parliament thought about factors that might cause children in school to feel worried or stressed and how AI in the future could be used to alleviate this. Features of the children's designs included providing the children with tips to help them with stress and included a 'hug button'. It is interesting to note that while the children here expressed optimism about the role AI could play in supporting

wellbeing, at numerous other times across the project Members of Children's Parliament have talked about the value they place on human interaction for this same purpose and concerns about humans being replaced. Though they see a role for AI to play in supporting them, they have been clear and consistent in the view that pastoral care is primarily a job for trusted human adults. This was discussed with the Science Ceilidh, where the children explored the question 'How will AI affect the role of the teacher?' Children emphasised the importance of the teacher's role for care and emotional help, explaining that they worry if AI is used too much in their education, then their emotional needs may not be met. Many children discussed how AI could be used to help teachers do other tasks in their role, such as lesson planning, hence giving more space and energy for the teachers to interact and support the children.

“It could make their [teachers] job easier because it could help them make lessons.”

Member of Children's Parliament, Edinburgh

On the other hand, the children had many worries about the future of AI replacing the role of the teacher or the possibility of AI teaching lessons without human interaction.

“The AI is only focusing on teaching the class because that's what it's been programmed for. The person who programmed it hasn't made it think about the children's emotions.”

Member of Children's Parliament, Edinburgh

Children across the project have also expressed worries about the fallibility of AI, especially those designed to provide recommendations. They pointed out that they learn in different ways and many children discussed feeling worried that AI may not understand individuals' unique learning needs, especially for neurodivergent children. Members of Children's Parliament brought up concerns that AI may provide inappropriate information, either for the children's learning level or for their age.

“So if you’re in school, in the future for example, and the AI is deciding, it could give you a question that’s much more difficult than what you’ve done. Either the coding was wrong, or people didn’t put in enough data.”

Member of Children’s Parliament, Edinburgh

“AI might not understand neurodivergent people.”

Member of Children’s Parliament, Edinburgh

“It [AI] can come up with inappropriate stuff – 18-plus.”

Member of Children’s Parliament, Edinburgh

Consistently across the project the children have raised both hopes and worries about AI in relation to learning styles, identity, disabilities and neurodivergence. For example, during the University of Edinburgh design challenge, one group created a handheld AI translation device that supports children who do not speak English as a first language. They explained that this respects their cultural identities, their right to non-discrimination and to be listened to. Other designs such as ‘Maths World’ – a fully immersive AI maths game – helps children learn in different ways that are suited to individuals and fully accessible for disabled children. The children emphasised that Maths World makes learning fun, supporting the right to both education and play. Making learning fun and engaging was a key theme across all the children’s designs.

“[Our AI translation device] supports non-discrimination and the right to be listened to.”

Member of Children’s Parliament, Edinburgh

“So, it’s to do with, like, maths and ...if people have disabilities. For instance, [if] they can’t write or anything...they can play this game.”

Member of Children’s Parliament, Edinburgh

Both Children’s Parliament and our partners at Edinburgh University observed that the children’s ideas often centered around AI systems that currently exist and focused on popular associations such as maths and robots. Across the project this has been a common occurrence amongst the children, as their knowledge of AI before this project was, and often still is, driven by popular cultural and media narratives, suggesting further need for education about AI. Mirroring these popular notions of where AI is found, some of the generalised fears of ‘AI taking over’ frequently found in popular discourse presently were also expressed by Members of Children’s Parliament.

One activity in the Edinburgh workshops focused on several iterations of a fictional maths learning app. Each new version utilised a greater amount of personal data including the use of video and, at the extreme end, brain wave monitoring to assess emotions and attention. Members of Children’s Parliament were uncomfortable with AI systems accessing this level of data and dubious about the accuracy with which they could determine internal emotional states. Most children were broadly happy with their teacher having access to data from learning apps but were less happy with it being shared with parents/carers or external parties like researchers or private companies.

Overall, children in Edinburgh saw both pros and cons of AI being used in their education, both in the present and in the future. With AI already integrated into many classrooms via learning games and apps, the children considered it to be important for them to understand AI’s role, to keep them safe and to allow them to consent to any data being used. They also felt that they should have a say about how AI will be integrated into their education and feel strongly that this implementation should be inclusive of all learning needs.

“Remember to include others. Think of all children no matter what! Make sure that the AI is safe!”

Member of Children’s Parliament, Edinburgh

What our partners told us

The team at the University of Edinburgh’s Centre for Research in Digital Education highlighted how the children have a good understanding of their rights, and how this helps them take critical approaches to understanding AI in their education. They were surprised by the children’s understanding of AI for translation, suggesting that the children, having taken part in this project, have learned more about AI than other children the department works with.

“They were very engaged in the topic. They know about their rights; some were able to apply their rights when thinking about future scenarios.”

Prof. Judy Robertson

“They had a good grasp of their right to play, and the right to inclusion, which I was impressed with.”

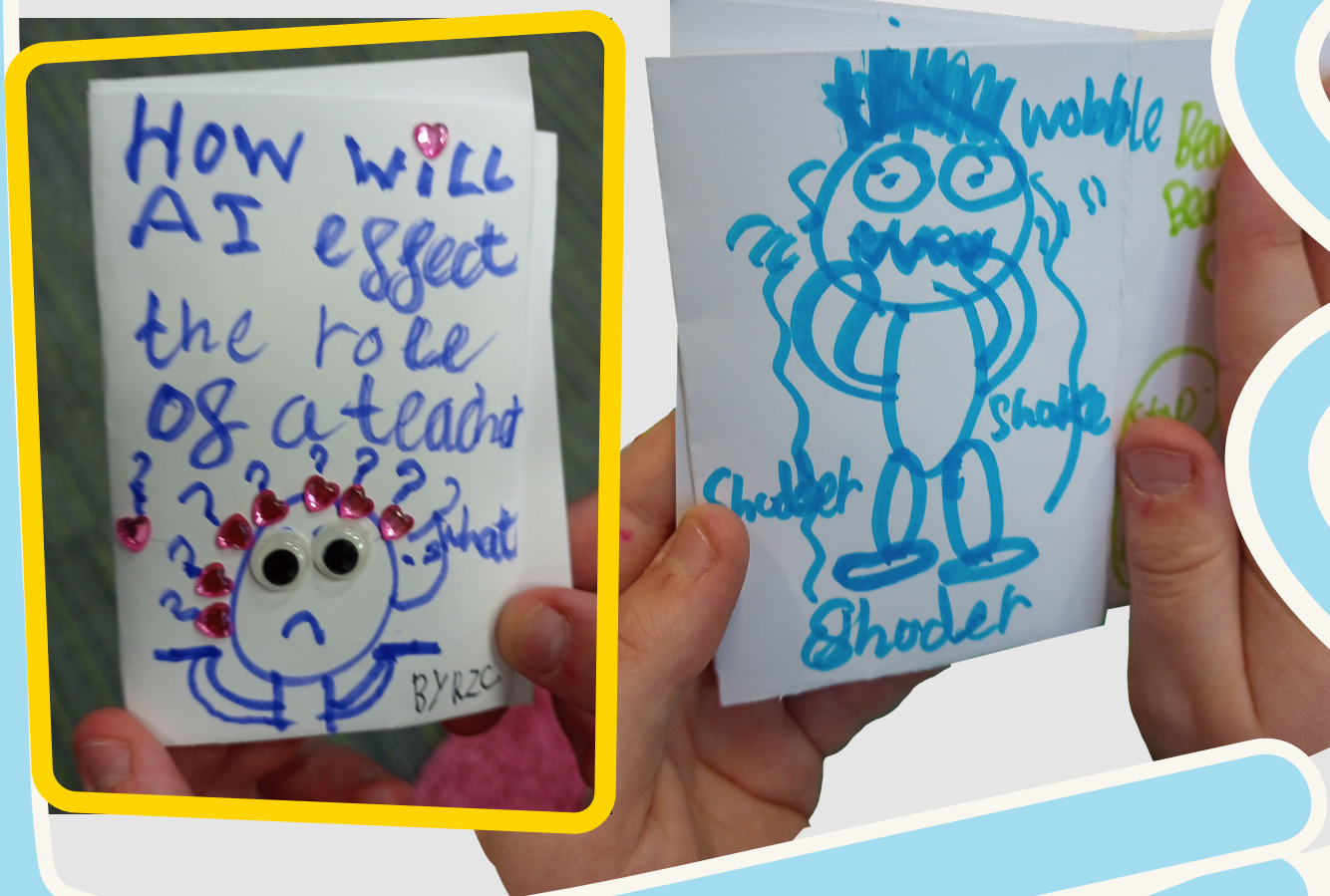
Jasmeen Kanwal

“It was a good reminder of the importance of AI literacy from a young age, and of how things might be different if technology designers actually listened to what children (and people in general!) want and need out of tech.”

Jasmeen Kanwal

Looking to this partnership’s impact, partners here emphasised the importance of child-friendly AI education and that children should be consulted in the design of new technologies that affect their education. They plan to use the learnings from the partnership to further develop their workshop design for teachers and school staff around AI and Education.

Images (opposite): Children’s illustrations.



“Our project is now expanding on its AI literacy work with professional learning workshops for teachers and school leaders – the Children’s Parliament workshop was an excellent starting point for us on this journey, giving us a better sense of what is possible with primary-aged children.”

Jasmeen Kanwal

“It has encouraged me to do more consultations and projects about AI and children in the future.”

Prof. Judy Robertson

Both Jasmeen Kanwal and Kate Farrell highlighted how a children’s rights approach using both creativity and establishing a warm and welcoming space has given them inspiration to take this into their own practice. This is also a reflection we shared: that approaching complex topics around AI with creative activities has offered the children different entry points for understanding and reflection.

“I loved that there were plenty of opportunities for the kids to get creative and hands-on – what an excellent table full of crafting materials!”

Jasmeen Kanwal

“This has certainly made me think more creatively about how we approach workshops with learners in the university and how to set up a creative and relaxed environment.”

Kate Farrell

“It has encouraged me to do more consultations and projects about AI and children in the future.”

Prof. Judy Robertson

