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Response to question on notice from the Employment, Education and Training Committee's public hearing for the Inquiry into AI in Australian Education: Do governments have a role to play, collectively, in either purchasing tools—and are there better tools—or in building our own tool that schools can use?

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We are generally of the view that an intervention into purchasing or developing a tool would not be effective nor value for money. We particularly emphasis the role of teachers in education above and beyond technology. Our overarching concerns are:

- 1. Constantly changing technologies. The development of generative AI tools is currently such a volatile space that any risk assessment would surely indicate that entering this space would be a dangerous move. An ever-expanding set of tools is improving constantly. Anything developed by, or even purchased by, government would be rapidly out of date. For example, new large language models are already in development that may reduce the ethical issues related to current models, for example in terms of copyright infringement, and we need to be poised to take advantage of these, not remain committed to existing models or those on which proprietary tool development may be based.
- 2. Negative precedents for government educational technology interventions. Historical experience with educational technologies bought/developed by governments indicates that it has not met expectations.
- 3. Lack of evidence base. There is currently no substantial evidence that the development of such a tool would benefit learning in any way. The question of whether edtech has improved learning remains uncertain, despite the investment of millions of dollars (Livingston 2012, UNESCO 2023). Rather, UNESCO emphasises the significance of "the human connection on which teaching and learning are based" (UNESCO 2023, p V.)
- 4. The limitations of a 'representative' corpus of data. Better data does not mean accurate outputs in large language models: they operate in statistical prediction so they cannot represent 'facts'. Indigenous knowledge is particularly sensitive and indigenous repository experts suggest it should not be available for data mining, as outlined in this abstract for a recent webinar on generative AI and indigenous data hosted by the Australian Computer Society.
- 5. **Need for students to access a diverse range of generative Als.** Accessing, using, comparing and critiquing diverse tools will be essential to developing critical and creative digital literacies.

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We suggest the following alternatives:

- 1. **Invest in educators.** Investment in extensive teacher professional learning and in teacher release time to experiment with these tools would be a better use of funds and more likely to address equity issues. These teachers can then cater for specific needs/potentials at the ground level rather than a 'one-size-fits-all' approach.
- 2. **Promote a national conversation.** We point to the successful development of the TEQSA assessment reform guiding principles (to which some of us contributed) as to the power of a small focussed body of work built on educational expertise, that provides meaningful but not prescriptive guidance (Lodge et al 2023). Such discussions could consider: how governance processes could guide local purchase of software; or approaches to enhance equity; or the possibility of a repository of copyright appropriate, quality Australian oriented information that is appropriately diverse and open access. We note a lack of involvement of educators in generative AI tech development investment in gen AI tool development, however, we argue that the education profession needs to drive the development of tools that are fit for purpose.
- 3. **Coordinate across jurisdictions.** Companies such as Microsoft are already working with state governments to develop their own bespoke learning bots, drawing on school and system-based inputs as well as underlying LLMs (see SA). There could be a role for national coordination and sharing evidence about success with respect to these various projects.

References

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