A literature review of South African schools for the blind and their use of educational sexual models in comprehensive sexuality education

Lindokuhle Ubisi

Department of Psychology, University of South Africa, Pretoria, South Africa
ubisilm@unisa.ac.za
https://orcid.org/0000-0001-5228-6686

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Abstract

Internationally, educational sexual models (ESMs) have been gradually incorporated into comprehensive sex education (CSE) in schools for the blind (SFB). However, there is limited evidence that this has been taking place in South African SFB. This review sought to establish how these models are perceived by teachers and whether South African teachers receive any exposure to, or training to use, these models during their teacher education. The review not only established that limited training and exposure is taking place, but that teachers state that they need these models but feel constrained by social censorship. This means that crucial information was lacking from their lessons (e.g. authentic demonstrations where learners can feel and touch to learn). The review suggests that teachers need to be capacitated with appropriate pedagogy, competencies, and resources to respond to controversial areas of teaching and learning such as the place of ESMs in CSE lessons.

Keywords: comprehensive sexuality education, educational sexual models, learners with visual impairment, parental censorship, schools for the blind

Introduction

Despite the public panic, the South African Department of Basic Education (DBE, 2021) has gone ahead and introduced a comprehensive sexuality education (CSE) curriculum in both mainstream and special needs schools. CSE refers to an age-appropriate, value-driven approach to equipping individuals with knowledge, values, and beliefs about gender, sexuality, power, safe sexual practices, age of consent, communication in relationships, and more, in order to make informed decisions about their growing psychosexual development (UNESCO, 2018). However, the controversies surrounding CSE are that some parents and religious organisations feel that it sexually grooms learners through its explicit imagery, encourages early sexual debut and, in turn, corrupts learners’ innocence (Chappell, 2015; Rohleder et al., 2009; Ubisi, 2020a). It is crucial to consider these debates (which will be
addressed elsewhere in this paper) given that, in the African context, disability and sexuality are rarely discussed simultaneously (Chappell, 2015; Rohleder et al., 2009; Ubisi, 2021a). Particularly when it comes to children living with disabilities, it is believed that these learners are forever children (Groce et al., 2007; Hanass-Hancock et al., 2013; Louw, 2017), meant to be kept pure (de Reus et al., 2015; Hanass-Hancock, 2009; Rohleder et al., 2009), and believed to be uninterested in sex, therefore not needing any CSE (Krupa & Esmail, 2010; Rohleder et al., 2012; Ubisi, 2021b). At the same time, local and international research has indicated that children living with various disabilities, including learners with visual impairment (LVIs),\(^1\) are at a heightened risk of rape, exploitation, and HIV infection if not adequately prepared with appropriate CSE (Chirawu et al., 2014; Kelly et al., 2002; Kelly & Kapperman, 2021). Yet, even though the South African DBE has rolled out content such as CSE-scripted lesson plans (SLPs) with learners living with various disabilities in mind (Ubisi, 2021c), no detailed SLPs are specifically available for teachers in schools for the blind (SFB). In addition, to facilitate tactile learning, there are no prescribed educational sexual models (ESMs) teachers can use that LVIs can touch and feel.

For this study, an ESM refers to any external, anatomically correct model of human genitalia used for demonstrative and educational purposes (Kapperman & Kelly, 2013, 2014; Krupa & Esmail, 2010). It should be pointed out here that dildos, vibrators, and masturbators do not fall within the category of ESMs referred in this study.\(^2\) ESMs are used much like biological models where, for example, the physiology of the digestive system is broken down into various main and sub-components to demonstrate how food is processed in several stages, including the responsible organs and their functions. Much like these biological models, ESMs can be produced from silicon or cast material with or without a foreskin and include testicles to demonstrate a real-world impression of male or female genitalia (see seminal work by Kapperman et al., 1993). Another way ESMs can be used is through designs that dissemble into parts to demonstrate the inner make-up of, for example, the vagina and its internal and external layers, or the penis and its urinary tract glands (Kapperman et al., 1993). This is because for CSE to be effective for target audiences such as LVIs, it is recommended that such tactile learners be given access to tangible objects like ESMs to make meaningful connections between anatomy and its functions (Kapperman & Kelly, 2014; Reynolds, 2019; Trief et al., 2010). At the same time, teachers must be adequately trained, and feel comfortable in how to use these models (Kapperman & Kelly, 2013; Kelly & Kapperman, 2021; Krupa & Esmail, 2010). In resource-rich countries like the USA, some teachers in SFB are prepared as to when and how to incorporate ESMs during their CSE lessons during their teacher training (Kapperman & Kelly, 2013; Kelly & Kapperman, 2012; Krupa & Esmail, 2010). To date, there are few studies in South Africa to ascertain whether this exposure or mode of instruction is taking place in local SFB. The aim of this study is therefore to ask: “How are these models being perceived by teachers” and “Do South African teachers in SFB

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\(^1\) LVIs refer to learners with low, partial, one-sided, or complete loss of vision (Kapperman & Kelly, 2013).

\(^2\) The consulted literature (e.g. Taylor, 2011) has suggested that products such as dildos, vibrators, and masturbators are considered assistive sexual devises or sex toys, and are not primarily used for educational purposes but to enhance sexual pleasure. Parents may resist ESMs because they might falsely associate them with pleasure-enhancing devises. But the ESMs would have been used during teaching education for pre-service teachers to deliver CSE lessons to LVIs (Kapperman & Kelly, 2013, 2014; Kapperman et al., 1993).
receive any preparation to utilise these models during their teacher training?” Foucault’s (1990) theorisation of the pedagogisation of children’s sexuality provides a useful framework to start thinking about this subject as well as its implications for teaching and learning.

Theoretical framework: Foucault’s theorisation of the pedagogisation of children’s sexuality

Foucault (1990) saw sexuality as a construct created by knowledge and power. And for Foucault (1977), influential disciplines such as medicine, psychiatry, and religion have created discourses that regulate who can/cannot say what, or perform/not perform certain actions. According to Foucault (1977), discourses construct subjects (e.g. sane/insane) which, in turn, create certain consequences (fertile/infertile). For example, Kempton and Kahn (1991) maintained that the mass sterilisation movement of persons with significant disabilities in the 1880s was propelled by a socio-medical discourse that assumed that persons with significant disabilities were “sexual perverts” born with a propensity for sexual promiscuity (p. 96). Foucault (1990) would have claimed that these discourses were not only constructed to control the minds and bodies of persons with disabilities, but also raise questions as to who is deemed desirable (Ubisi, 2021a) and worthy to reproduce—and with whom (Ubisi, 2020b). When it came to the sexuality of children, Foucault (1990) theorised that after the seventeenth century, powerful institutions such as the state, church, and schools placed limitations on who was allowed to be seen as sexual. This included a further restriction on children being seen as sexual beings because sex was seen as reserved only for procreational purposes; children were to be kept pure (Bennett & Harden, 2019; Deacon, 2006; Egan & Hawkes, 2008). The topic of sex was seen as dangerous and likely to lead to early sexual debut. Sex education in schools, as a site of disciplinary power, therefore, was replaced with chastity and abstinence (Foucault, 1990). Today, there are still parents, teachers, and institutions who rely on Foucault’s pedagogisation of children’s sexuality to dismiss CSE as unnecessary or potentially detrimental for children (Chappell, 2015). This is mostly the case when children with disabilities such as LVIs come to mind (Kelly & Kapperman, 2021; Rohleder et al., 2009; Ubisi, 2020c). These perceptions not only suggest that there is something evil about teaching children about their sexuality, but also that there is something problematic about the sexuality of persons living with disabilities (Rohleder et al., 2009).

In this paper, I ask, what are teachers in SFB’s perceptions around the use of ESMs in CSE? Moreover, what exposure (if any) are teachers given during their teacher training to use ESMs in their CSE lessons? To do this, I first discuss the pedagogy of how CSE is currently being taught to LVIs, including the available support materials for teaching this subject. Then, I discuss the need for ESMs in SFB and the inclusive education policies that support

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3 See recent interpretations of Foucault’s pedagogisation of children’s sexuality in Bennett and Harden (2019), Deacon (2006), as well as in Egan and Hawkes (2008).

4 It should be noted that in this study, “children” refers to children in the age group of 16–18 years. These learners are usually in Grades 10–12.
the inclusion of these resources in special schools. And I further discuss the potential controversies that might arise with the introduction of controversial topics (and the associated resistance) such as the use of ESMs in SFB.

**Current pedagogy of delivering CSE to LVIs**

According to Esra and Mayet (2020), it is believed that there are over 1.4 million children living with a severe visual impairment, worldwide. In South Africa, the national repository, Statistics South Africa (2014), estimated that about 11 per cent of children aged five years and older have some difficulties in seeing. Despite these statistics, SFB usually consist of small classes (about 7–10 learners of various ages per class) with learners with either partial to complete sight, or some even with multiple disabilities (du Plessis, 2020). The CSE curriculum in South African schools is housed within the school subjects, Life Skills (Grades 4–6) and Life Orientation (Grades 7–12; DBE, 2021). As for the teaching of CSE to LVIs, there are various classroom practices and teaching methods to remove the barriers to learning associated with the visual demonstration of these materials. For example, teachers can employ various curriculum differentiation techniques such as using visual outlines, tracing, and assistive technologies such as optical character recognition, screen reader, and text-to-speech software (du Plessis, 2020; Erwee, 2020; Viljoen, 2020). The role of these strategies is to create tactual descriptions of a real-life object such as a human hand or other everyday items. Teachers can also use language to provide LVIs with a description of the object or item (du Plessis, 2020; Erwee, 2020; Viljoen, 2020). However, there are complexities when these representations are to be explained to learners who are completely blind (Bray, 2021; Kapperman & Kelly, 2013; Krupa & Esmail, 2010). For example, while it might perhaps be easy to trace the major parts of the male reproductive system including the body of the penis, its head (glans), and testicles, it would be more challenging to provide a meaningful illustration using a 2-dimensional drawing of the female reproductive system. For one, the outer layers of the female reproductive system are multi-fold, including the vagina, clitoris, as well as the inner and outer labia (Kamegawa, n.d.). Moreover, the shape, texture, and look of these parts differ from one female body to another (Kamegawa, n.d.). As for the topics covered within this curriculum, in a recent content analysis, I (Ubisi, 2021c) interrogated the type of activities included within the DBE’s SLP teacher and learner books. The aim of that study was to find if the DBE’s CSE SLPs had any focus on the sexuality of persons with various disabilities. Of the only three activities in Grades 10 to 12 found within the entire Grades 4–12 curriculum (Ubisi, 2021c), none had an applied, realistic, or hands-on approach to providing lessons to LVIs. Thus, teachers of LVIs need more detailed, scripted, and practical methods to teach CSE in a more meaningful way.

**The controversies (and resistance) that arise with the integration of ESMs in SFB**

According to inclusive education policies, such as the Education White Paper 6 on Special Education Needs (Department of Education, 2001), every child has unique qualities,
potential, and educational needs. This implies that the diversity of these characteristics, abilities, and learning needs must be considered during the planning, design, and implementation of educational material as well during the teaching and learning process (Department of Education, 2001). The national legislative framework, for example, the Children’s Act 38 of 2005 (Republic of South Africa, 2006) safeguards all children’s sexual and reproductive health rights. For instance, Chapter 2 (Section 13) of the Children’s Act states that with the age, maturity, and phase of development taken into consideration, every child, including LVIs, are entitled to the right to age-appropriate CSE is offered to them in a clear and accessible manner. For this reason, it is suggested by the available literature that it is not enough for teachers to just talk about CSE to LVIs; they should provide resources that allow for a more practical demonstration of the DBE’s CSE SLPs (Bray, 2021; Kapperman & Kelly, 2013; Krupa & Esmail, 2010). In some US states, the use of ESMs in CSE lessons for LVIs is part of the practical components of teacher training (Kapperman & Kelly, 2013).

However, the cost and controversies surrounding these models might be a concern for under-resourced and diversely populated countries such as South Africa. For example, some parents might oppose CSE and ESMs, based on cultural and religious reasons. But CSE, in fact, is intended to protect the rights of sexual minority groups by sensitising learners to the repression of othered groups such persons living with disabilities (Ubisi, 2023). Moreover, in South Africa, there is a pedagogy of discomfort amongst teachers responsible for teaching CSE due to limitations in their own teacher training (Hanass-Hancock et al., 2013). Louw (2017) added that cultural and religious taboos regarding talking about sex also contribute to the problem, and Rohleder and Swartz (2009) highlighted tensions in the balancing of discourses of human rights and potential harm as another area of concern. This implies that the call for inclusivity in CSE is not just for accommodating learners with special educational needs, but for teachers to also be capacitated with the required knowledge, skills, values, practices, and resources to deliver this curriculum (Chirawu et al., 2014; de Reus et al., 2015; Rohleder et al., 2012). When it comes to the resources needed in delivering CSE to LVIs, the literature has been clear about the need for accessible formats such as Braille and audiotapes (e.g. Philander & Swartz, 2006). However, there is limited exploration into teacher perceptions and training regarding the use of ESMs during their CSE lessons, except for Khau’s (2022) study.

Material and methods

No ethical clearance was required to conduct this study. A desktop search was conducted on Google Scholar, World of Science, and ministerial educational departmental websites for local online publications, journal articles, teaching and training materials, books, and official documents published between 1992 and 2022 to investigate the perceptions, training, and exposure of South African teachers in SFB to ESMs. The search used broad key terms to search for publications in the area including terms such as “sex education,” “sexuality education,” “comprehensive sexuality education,” “educational sex(ual) models,” “non-verbal demonstration,” “children with various disabilities,” “blind learners,” “learners with visual impairment,” “schools for the blind,” “teachers in special need schools,” and “South
Africa.” To ensure a maximum of publications were found, snowballing of literature from reference lists of prominent researchers in field were consulted. In total, 310 publications were obtained from an initial search. After perusing and classifying these publications into interpretative themes (see Table 1), the search reached data saturation based on these themes. All in all, 31 local publications were selected for final analysis and discussion.

Selection/inclusion criteria

The publications that were selected for analysis and discussion had to have discussed perceptions of teachers of LVIs (experiences, beliefs, practices, tensions, and challenges) as well as training and exposure through teacher education in utilising ESMs during CSE lessons. Preference was extended to publications that (a) focused on LVIs instead of generally focusing on children living with various disabilities, (b) interrogated teachers’ voices or experiences in using or recommending educational resources like ESMs to deliver CSE, and (c) publications issued during the 30-year time span of 1992–2022. It should be noted that because this study relied on a desktop search approach, there are several publications that may not have made it into the search.

Findings

Table 1 presents clustered themes of local literature based on a desktop search investigating teachers of LVIs’ perceptions with regards to teacher training to use resources such as ESMs in their CSE lessons. The table shows that there is a dearth of literature in the South African context exploring previous exposure to the use of resources such as ESMs in CSE during teacher training.

| Teachers of LVIs’ perceptions of the use of resources such as ESMs during their CSE lessons | • Literature suggests that teachers need resources for LVIs to feel, but it is unclear what types of resources they might need (e.g. Hanass-Hancock, 2009; Hanass-Hancock et al., 2013; Kelly et al., 2002; Louw et al., 2014; Rohleder & Swartz, 2009).
  • Some teachers identified the need for practical and suitable visual materials like Braille, audiotapes, pictures, posters, DVDs, charts, and visual prompts (e.g. Chirawu et al., 2014; de Reus et al., 2015; Louw, 2017, 2019; Philander & Swartz, 2006; Rohleder, 2008; Rohleder et al., 2010).
  • Other teachers reported that they found the resources in their schools unsuitable and therefore developed their own customised materials for their own purposes (e.g. Chirawu et al., 2014; de Reus et al., 2015). |

Table 1
Local literature review of teachers of LVIs’ perceptions around, and previous exposure to, the use of educational sexual models during comprehensive sexuality education
Discussion

This study wished to explore the perceptions and previous exposure of South African teachers of LVIs’ to the use of ESMs in CSE. Based on the findings of this study, there were teachers who identified the need for ESMs (Khau, 2022). Others pointed to the need for resources that LVIs could feel and touch such as objects, tools, or visual or sound materials (Chirawu et al., 2014; Hanass-Hancock, 2009; Louw, 2017) but were not clear if these included resources like ESMs (except for Khau’s study). Khau (2022, p. 34) reported that the teachers in her study were uncomfortable in using “sexual devices” because of shame, and the fear that their learners would not respect them. Most of the literature identified a need for audio-visual materials like Braille, audiotapes, and pictures (Philander & Swartz, 2006; Rohleder, 2008; Rohleder et al., 2010). The reason for this may be that some teachers rely on resources they have more access to such as visual aids, DVDs, as well as Braille machinery. Another reason for this might be that these resources provide teachers with an easy, cheap, and convenient way of teaching CSE without provoking any anxiety or discomfort.

As has been established, some teachers reported feeling embarrassed or uncomfortable in teaching sensitive and controversial CSE themes (Hanass-Hancock et al., 2013, Louw, 2017, Rohleder et al., 2009) such as masturbation, oral sex, and homosexuality. Given the backlash that CSE as a curriculum has received in previous years (see Ubisi, 2020a), it makes sense to teach CSE in a modest and restricted way that avoids the need for further non-verbal instruction. Considering Foucault’s (1990) theorisation of the pedagogy of children’s sexuality, the image of a teacher walking into class with models of an erect penis and vagina would incite far more public censorship from parents, certain political parties, and religious leaders given that these groups hold influence over what should or should not be included in the curriculum. Furthermore, it goes without saying that ESMs are costly (Bray, 2021; Kamegawa, n.d.; Kapperman & Kelly, 2013), with some SFB relying on donations to keep up with the daily operation of running their schools.

Yet again, it must also be acknowledged that some teachers may not be aware of the existence or use of these resources. This suggests that the use of ESMs to teach CSE is a relatively new area of teaching and learning that few teachers of LVIs have been exposed to. This was corroborated by the limited literature that suggested that teachers of LVIs have been given prior knowledge on how to use ESMs during their teacher education. This further
highlights the need for more training of special needs teachers in South Africa to equip these teachers with the necessary skills to teach the topic without stressful discomfort. However, a promising finding from this study was that when some teachers found the available resources allocated to them unsuitable, they created or customised materials that they found appropriate with the age and maturity level of their learners in mind (Chirawu et al., 2014; de Reus et al., 2015; Ubisi, 2020b).

Given that some teachers of LVIs expressed the need for ESMs (de Reus et al., 2015), inclusive guidelines as to how and when to incorporate ESMs during their CSE lessons need to be provided to assist teachers in SFB. For example, Kapperman and Kelly (2013) cautioned that if a teacher feels opposed to using ESMs during their lessons, then the lesson should be taken by a more inclined teacher. Krupa and Esmail (2010) suggested that teachers focus on three categories (content, environment, and delivery) to be considered when preparing for a sex education lesson with LVIs in mind. While age appropriateness seems to be the recommendation when it comes to content, it should be kept in mind that learners in a class may vary in age with some learners being much older than the expected age for their grade.

The learning environment refers to the processes and procedures that need to take place before instruction is delivered, such as planning the lesson with a specific audience (e.g. individual versus a group audience) in mind (Krupa & Esmail, 2010). Although the DBE (2021) has rolled out a CSE curriculum to be taught in all schools, a key recommendation by Kelly and Kapperman (2021) was that teachers and the school inform parents about the ESMs to be used, as well as get written permission before the lessons. This is because some private or single-religion schools may have a code of conduct that differs from public schools’. However, as Foucault’s (1990) thoughts on around the pedagogisation of children’s sexuality suggest, religion may stand as one the barriers to children receiving CSE. This, in some cases, may contradict the values and principles of the public schooling system—by for example, replacing the teaching of sexuality diversity with religious studies (Ubisi, 2023).

During the delivery of instruction, Kapperman and Kelly (2013) recommended teachers utilising other supporting tangible objects such as condoms as well as anatomically correct models for tactile learners to feel and touch. For example, the Jim Jackson 3-D genital models can be used to demonstrate putting on male and female condoms (Kapperman & Kelly, 2013). In the US, the American Printing House for the Blind’s “Touch, Label, and Learn Poster: Human Skeleton” (https://www.aph.org/product/touch-label-and-learn-poster-human-skeleton-anterior-view/) has provided an interesting way for LVIs to make connections of sexual anatomy by allowing contact, characterisation, and understanding of general human sexual anatomy (Kamegawa, n.d.). The cast by artist Jamie McCartney titled “The Great Wall of Vagina” was made following 400 castings of women’s vaginas to demonstrate the diversity of this female sexual organ. The “Gena: Models for Inclusive Sex Ed” (https://disabilitylab.berkeley.edu/gena-models-for-inclusive-sex-ed/) has rolled out one of the first affordable, user-friendly, modular, and 3-D sex positive models of the female
This study suggests that there is a need for researchers in future studies to explicitly ask teachers of LVIs if they are aware of, as well as how they feel about, using ESMs to teach CSE; and to consider ethical procedures such as do the DBE, parental permission, or the school’s governing body require them to use ESMs. Researchers can do this by asking teachers to imagine how they would use ESMs in their classrooms. Changes in the teacher preparation curriculum can assist upcoming teachers by exposing them to ESMs during their pre-service training. For example, develop a manual to accompany the current DBE CSE SLPs for teachers in SFB. Secondly, an attempt can be made to provide teachers with assertiveness training to develop the confidence to teach using these models. Furthermore, there needs to be workshops and pre- and post-assessments of their ability and confidence levels to utilise ESMs. Teachers already involved in delivering the CSE curriculum need to clarify their fears about working with these models and, if further training is needed, they need to voice these issues with their departmental heads. As most South African SFB are already under-resourced and must rely on community donations to run their school’s operational demands, intergovernmental organisations such as the United Nations Educational, Scientific and Cultural Organization and World Health Organisation could be approached to assist in bringing in experts in the field, and to provide affordable models for schools free of charge.

Given that parents have been identified as one of the potential sources of censorship when it comes to schools offering CSE to learners living with various disabilities (Chirawu et al., 2014; de Reus et al., 2015; Rohleder & Swartz, 2009), further research not only needs to explore the views of parents regarding these models, but what they understand about why such resources are needed in a classroom with tactile learners such as LVIs. The problem may be that parents are not aware of the nature and purpose of ESMs and how they are used, and therefore might require education themselves to understand the educational value of the models during these lessons. As Foucault’s (1990) theorisation of the pedagogisation of children’s sexuality has suggested, the concept of evil being associated with children’s sexuality was previously not as restrictive as it is now. That is, the idea that children are pure and sexually innocent or do not have sex was not the dominant socio-cultural discourse (Bennett & Harden, 2019; Deacon, 2006; Egan & Hawkes, 2008). However, due to the influence of religion, the governing of mentalities, conduct, and decision making around sexuality has been controlled through conservative socio-cultural discourse (Bennett & Harden, 2019; Deacon, 2006; Egan & Hawkes, 2008). Perhaps by engaging with parents and other powerful social institutions involved in curriculum design and policy-making, the discourse around protection versus empowerment might shift the dominant socio-cultural discourse when it comes to the need for ESMs in CSE for LVIs.

The limitation of this study is that only publications that conformed to the selection criteria were selected. There are many other publications online and some not available in print that could have been missed. However, the paper presents an ongoing study into the knowledge,
skills, and resources needed to understand the psychosexual development of children and adults living with visual impairment.

**Conclusion**

This study aimed to explore the perceptions of teachers of LVIs and their preparation during their teacher training as well as their readiness to use ESMs during their CSE lessons. The findings suggest that some teachers might be unwilling to use these models during their CSE lessons due to shame and embarrassment (Khau, 2022). Another reason might be that they may have had limited exposure to these models during their pre-service training. Therefore, a follow-up study to explore the link between personality and readiness or teacher competence (e.g. emotional intelligence, open-mindedness, resilience, and openness to change, to name a few) could be conducted. Given that the available literature suggests that children living with various disabilities are at an increased risk of rape, molestation, and HIV infection (Chirawu et al., 2014; Kelly et al., 2002; Kelly & Kapperman, 2012), the need for CSE for them is far more urgent (Kelly & Kapperman, 2021; Philander & Swartz, 2006; Rohleder et al., 2010). For this reason, for CSE to be effective for learners with special needs such as LVIs, these lessons need to be carried out with appropriate resources such as ESMs (Bray, 2021; de Reus et al., 2015; Krupa & Esmail, 2010). However, even with the enactment of inclusive education policies by the South African education system, the findings of this study suggest that South African SFB continue to grapple with their position in integrating controversial pedagogy such as the use of ESMs in CSE lessons (Khau, 2022). This may be due to other factors such as limitations in teacher education, parental censorship, as well as the cost of ESMs. Future research should explore how teachers and parents feel about the use of these models. Where education is needed to understand the place of ESMs in CSE, experts together with intergovernmental organisations such as the United Nations could step in to offer training with these models free of charge.

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