

Conference Theme:**Bridging Cultures, Co-creating Knowledge: Local Innovations and Global Visions in Education**

連結文化、共創知識：教育的在地創新與全球視野

Sub-theme Category:**Technological Innovation and the Future of Education: AI, STEAM, VR, XR, and Emerging Applications**

科技創新與教育未來：AI、STEAM、VR、XR 等應用

ENGLISH Oral Presentation Title:**A Reflective Practice on How to Engage Early Childhood Educators as Futures Thinkers of Education****Research Overview**

This is a non-experimental reflective practice study of students who consented to their assessed coursework as pedagogical evidence. Through systematic reflection and qualitative analysis, it examines the taught processes that led early childhood educators in Singapore to articulate visions of future education that can contribute to knowledge building and practice within teacher education.

Purpose of Study

Reflective practice and learners' agencies have long been recognized as cornerstones of professional learning and the goal of education. Students' assignment artefacts have potential as a source of pedagogical evidence in teacher preparation and professional development.

The purpose of this study is threefold. First, it seeks to demonstrate how futures thinking skills can be taught to educators who are mostly focused inwardly on solving daily classroom issues, helping them to scan the horizon and envision future education. Second, it aims to document the author's reflective engagement with the students and these artefacts as a form of systematic inquiry into teaching practice. Third, to contribute to methodological conversations by

demonstrating how non-experimental, classroom-embedded data can be used ethically and rigorously for reflective research and knowledge sharing in educational contexts.

Research Methods

Although not designed as a formal phenomenological study, this non-experimental reflective inquiry is guided by phenomenological principles, especially its emphasis on lived experience, meaning-making, and reflexive engagement with practice. The data comprises anonymized student assignment artifacts collected over two semesters as part of a postgraduate education coursework. Written consent from 32 students is obtained to release their strategic foresight assignments, which were originally created to enhance students' skills in future thinking, theory-practice integration, intellectual and practitioner reasoning informed by reading signals from social, technological, economic, environmental, and political (STEEP) trends, and were later compiled for reflection analysis.

Data sources included:

- Two individual assignments on future scenario planning and the learn from the future essay
- Journaling and engaging in artificial intelligence conversations
- Students' written reflections
- Students' feedback on teaching

Ethical considerations were prioritized. Assignments were de-identified, participation was voluntary, and informed consent was obtained where required by institutional guidelines. No grades or evaluative comments were included in the analysis to avoid power imbalances.

The analytical process involved two iterative stages. First, a thematic analysis was conducted to identify recurring patterns in students' forward-looking depth, their conceptual understanding of horizon-scanning frameworks, and ground-up issues. Second, the author engaged in self-reflection by interrogating how assignment design, processes, and instructional decisions may have shaped students' learning responses through students' written reflections and their conversations with artificial intelligence.

Results and Discussion

The findings highlight three interconnected themes.

1. Assignments as Windows into Learning Processes

Students' forecasting trends assignments offered valuable insights into how they interpreted global and national trends, managed issues and uncertainty, and linked coursework to personal

and professional experiences. This emphasizes the importance of assignments as process-oriented evidence rather than just outcome-based assessments.

2. Futures Thinking Capability and Professional Identity Formation

Analysis showed that students increasingly articulated themselves as agentic educators who can horizon-scan and envision futures that impact various stakeholders, including children and families. Language use shifted from reactive, account-based to more proactive, analytical, and reflexive stances, indicating growth in professional voice and agency.

3. Reciprocal Learning Through Author Reflection

Engaging systematically with student work and facilitation processes prompted the author to critically examine the assumption that, because educators are too overwhelmed with classroom issues, they are unable to build capacity to forecast trends in education. Several pedagogical refinements emerged, including redesigning assignment prompts, incorporating dialogic feedback, and creating spaces for collective reflection. This reciprocal relationship illustrates how reflective practice functions as a dynamic learning process for both students and educators.

Taken together, the results suggest that student assignments, when approached reflexively and ethically, can serve as powerful data for understanding learning and improving teaching practice. The paper argues that such non-experimental work is not a methodological limitation but a strength, offering contextually grounded insights that complement experimental and large-scale studies.

Conclusion

This reflective practice paper contributes to educational research by demonstrating how everyday teaching and learning artifacts can serve as valuable sources of inquiry. It promotes broader recognition of the co-creation of knowledge between academia and practitioners, supports non-experimental research at international education conferences, and encourages educators to see coursework assignments not only as assessments of learning but also as opportunities for pedagogical growth in teacher education and professional dialogue.

Keywords

Reflective practice; teacher education; practitioner inquiry, futures thinking, forecasting trends