



Developing Pre-service Teachers' Classroom-talk Competency through Video Visualisation and Peer Review

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01. BACKGROUND

- Classroom talk is essential for teachers to facilitate student reasoning, which is emphasised in the curriculum guidelines in Hong Kong.
- Pre-service teachers often find it challenging to engage in classroom talk effectively. (E.g., simple phrases, short-sentence responses, fewer probing questions, monologic approaches, and poor framing skills)
- Dialogic practices are key to knowledge construction, underscored by extensive and consistent studies.

02. OBJECTIVES

- To add functions to the current **video visualisation technology**.
- To create a **video visualisation-enhanced microteaching model** for assessment, feedback, and reflection.
- To develop students' **core teaching practices** and **classroom-talk competency**.
- To improve students' **reflection skills**.

04. FINDINGS

- The training equipped students with the gain in **self-efficacy**, especially in **classroom management**, whilst, by the figures shown in peer review, most students expressed their acquisition in their **own-peer-feedback quality**.
- The self-reported **technology adoption** and **reaction to instructional materials** were examined, showing that both aspects are relatively **positive**.
- Overall, this training gives students more confidence in their **teachers' role** and **professional skills**.

03. METHODS & PROCEDURE

Stage 1 Classroom Talk Workshop

- Ten **tutorial videos** introducing different classroom talk and APT frameworks were designed for students.
- Seminars** were conducted to review the content, provide examples of effective classroom talk and discuss the cases.



Stage 2 Microteaching

- Twenty-five students were required to conduct **microteaching** for 15 minutes during the training in Chinese subject.



Stage 3 Peer, Teacher, and Visualisation Feedback



- Other classmates** and **instructors** provided reviews.
- The **recordings of microteaching** were **transcribed** and **coded**, then **uploaded** to the visualization platform.
- Students received **the results of the video visualisation** of their classroom talk one week after their microteaching.

Stage 4 Response to Review and Reflection

- Students engaged in **self-reflection** after microteaching.
- Students were required to submit a **reflection report** after the training on the feedback and the visualisation of the classroom talk they saw.



05. CONCLUSIONS

- The training programs that combine **video visualisation** and **peer review** could develop teachers' **self-efficacy**, **confidence in their peer feedback quality**, and positive feedback on **instructional materials** and **technology adoption**.
- Our findings strengthen the case for a **discourse-focused approach** to improve teaching competence and **the use of classroom videos** for teacher educators.

"I can see the detailed scripts on the platform, so I can tell that during microteaching my questions are not specific enough and also not accurate, and sometimes I spend too much time explaining."

"The technology made my self-reflection more logical. I can then know my advantages and what I should do to improve myself."

