How Do Primary Pre-Service Teachers Use Feedback and Reflection Cycles to Plan Rich Mathematics Learning Experiences?

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Reflective practice is of utmost importance in teacher education as deep-transformative reflection is shown to improve life-long learning, professional practice and ultimately transform practice (AITSL, 2013). Research suggests that pre-service teachers struggle with the feedback and reflection cycle lacking justification for their thoughts, thus creating the need for more structured reflection throughout the teaching degree (Killic & Dogan, 2021). Cavanaugh (2021) along with Killic and Dogan (2022) in their recent publications on preservice teacher noticing, reflection and feedback, states that oral and written reflection after the lesson helps preservice teachers to review what happened providing them opportunities to develop a plan for future action. This also ties into the notion of receiving feedback to 'feedforward' (Price, 2010), allowing pre-service teachers to analyse their teaching and connect theory to practice, becoming more aware of any pre-conceived ideas.

Our study, conducted with 2nd year pre-service teachers, aimed to explore how a feedback and reflection cycle could influence lesson planning in a primary mathematics curriculum studies topic. There were three cycles of feedback each prompting reflection and adaptation or refinement of the lesson including: 1) a written lesson plan with feedback from lecturer, 2) present the lesson plan to peers with feedback from peers and lecturer, and 3) teach the lesson to children on campus with feedback from classroom teacher. An action research (AR) model is used to assess the culture and work of the academy which focuses on assessing teaching through systematic reflection and evaluation to inform ... innovative teaching practices (Harvey & Jones, 2021, p. 173). In this short communication, a discussion of the preliminary results will be offered. The findings suggest that detailed written feedback using descriptive rubrics (Brookhart and Chen, 2015) partnered with verbal feedback is worthwhile in helping PSTs plan rich mathematics learning experiences. Preliminary findings also suggest structured writing prompts like the 4R framework is somewhat useful in helping PSTs reflect on feedback.

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