



AAMT Position Statement Professional learning

The Australian Association of Mathematics Teachers Inc.



professional learning

Rationale

Highly successful teachers of Mathematics are active, lifelong learners. They engage in professional learning processes that include collegial interaction, professional reading and active exploration of new teaching ideas, practices and resources in the classroom. They reflect on practice and the new knowledge they gain, and learn from their experiences. Their active participation is based on their commitment to attaining the best possible outcomes for all learners and to help build the capacity of other educators.

A culture of professional learning is critical to the ongoing development of educator skills, knowledge and practice. Educators are the primary contributor to student outcomes. Their professional learning should be learner centred – collaborative, evidence based, sustained and evaluated. Ensuring professional learning is situated in practice is one of the keys to successful professional learning, as it connects the educator, learner and current pedagogy.

Position

The Australian Association of Mathematics Teachers believes that all educators of mathematics must have the opportunity to access high quality professional learning that promotes a culture of inquiry into teaching practice. Educators have a responsibility to be committed to the continual improvement of their practice through engagement in relevant and ongoing professional learning. Educators must be supported in their professional learning at institutional, system, state and national levels.

“ *Good professional learning challenges and inspires.* ”

The Australian Association of Mathematics Teachers believes that professional learning should be:

Relevant

For professional learning to be relevant, it must be directly related to educators and their work with learners. This can include a focus on mathematical knowledge required for teaching, strategies for improving outcomes for learners or guidance about appropriate pedagogical practice. Data from different sources can inform the content of professional learning.

Professional learning is particularly relevant when it is personalised to meet the needs of the educator. This can occur by taking into account the educators' prior knowledge, beliefs, experience, strengths and goals. Relevant professional learning builds on educators' current level of knowledge and leads to informed views about pedagogy, teaching resources and curriculum. Effective professional learning takes many formats including tertiary courses, collaborative inquiry into practice, lesson study and/or modelled lessons, online learning, conferences, workshops, mentoring and coaching. Modes for professional learning can be face-to-face or online; or a combination of these two.

Collaborative

Effective schools are learning communities, the core element of which is a culture of collaboration and collective responsibility for the development of effective teaching practices and improved student outcomes. Collaborative professional learning communities should have a systematic focus on student learning. Ongoing professional learning communities provide the foundation for the work that creates a whole school culture involving teachers, leaders, students and parents. Such communities view, discuss, study, and reflect upon effective mathematics practices from diverse classrooms. Professional learning should provide participants with the opportunity to collaboratively plan, apply, and inquire into their classroom practices.

Educators need to have a shared purpose if they are to successfully implement new approaches in ways that impact positively on learners.

Evidence based

Research has established that the most effective professional learning is grounded in practice and is focused on teaching and learning. It is informed by current knowledge about effective mathematics teaching, learning and pedagogy. Professional learning should immerse educators in research-based knowledge of the mathematics required for teaching and how students learn mathematics. The improvement of learning outcomes must be the focus of professional learning and should be based on evidence from different sources that is reviewed and discussed with colleagues.

Professional learning should always be connected to and must build upon, the educator's knowledge of and work with learners.

Sustained

Professional learning should be seen as ongoing, with educators encouraged to inquire into practice, trial and implement new approaches and evaluate results. Changes in practice occur when teachers see evidence of improvement in students' learning.

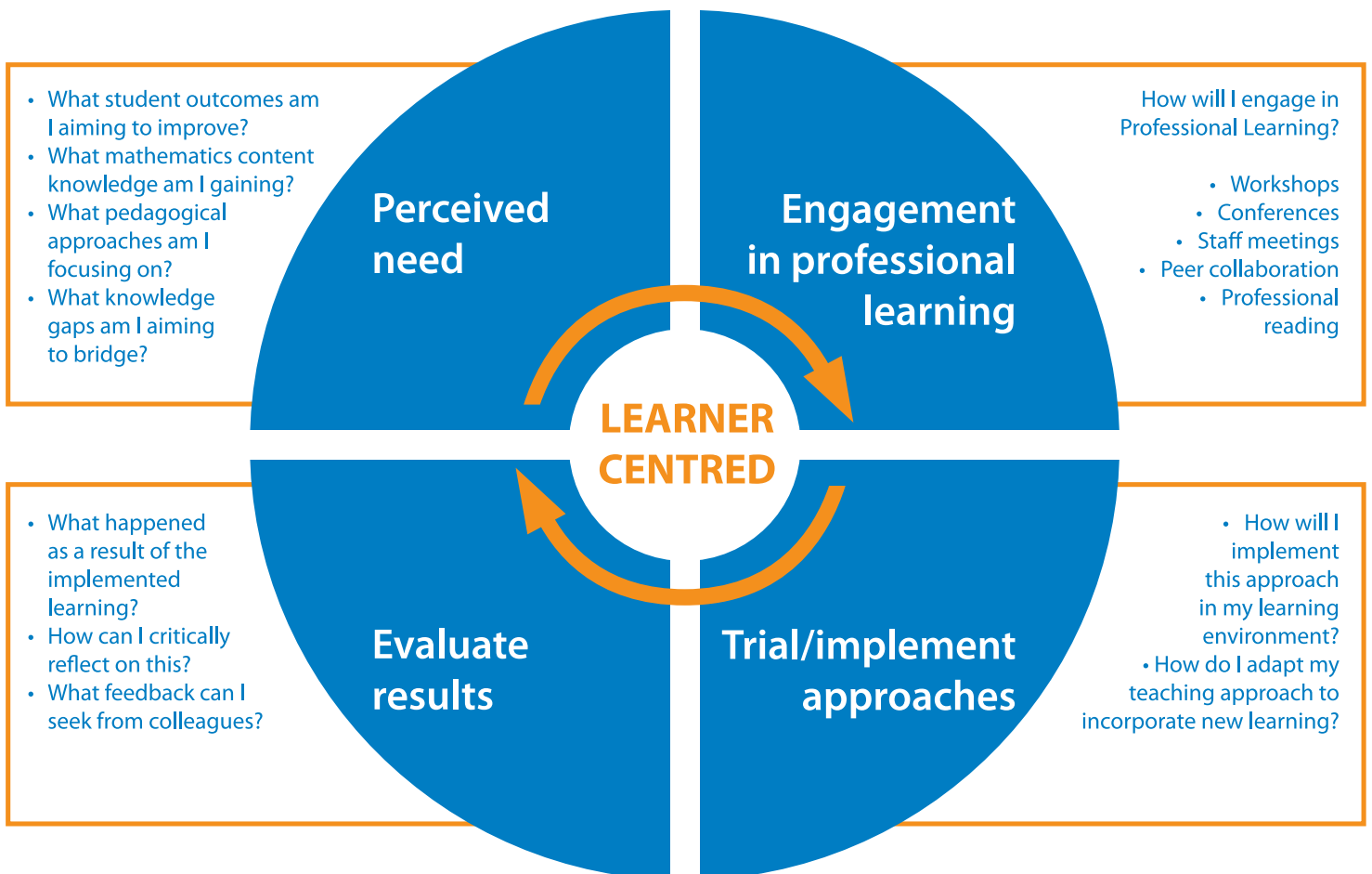
“ *Regular reflection with my colleagues helps me improve my teaching – if only we had more time to do it!* ”

The environment in which these changes can occur and be sustained needs to be provided through strong school leadership and the fostering of a supportive professional learning culture at an institutional, system, state and national level. Effective leaders provide learning opportunities for educators to implement the knowledge, skills, practices and attitudes gained through professional learning experiences. As the change process is a gradual and often difficult one, educators and leaders need to be supported and encouraged to trial, develop and evaluate new practices in order to maximise sustainability.

Engagement in professional learning activities also requires commitment on behalf of the participant to engage in an ongoing cycle of learning, and a willingness to support others in this process.

Evaluated

Professional learning should be part of a continual and ongoing process of learning and improvement. As the educator is exposed to new knowledge, there must be in-built opportunities for ongoing inquiry and reflection to determine the effectiveness of change. Evaluation of professional learning should be both formative and summative in nature, and ultimately will inform the educator of the next step in the cycle of improvement.



“ The AAMT conference was useful for me to cement my own thinking and just enough to challenge it too. ”

Recommendations for mathematics professional learning providers:

BUILD on educators' prior knowledge, beliefs, strengths and goals in teaching Mathematics.

ENSURE professional learning is current, evidence-based and connected to classroom practice.

ENCOURAGE AND SUPPORT educators of Mathematics to continue ongoing professional learning that develops their pedagogical content knowledge.

DEVELOP knowledge of appropriate pedagogies for the teaching of Mathematics.

BUILD an understanding of the 'Big Ideas' of Mathematics and how they are developed over time.

PROVIDE opportunities to develop problem solving, reasoning, fluency and understanding as they apply to teaching and learning.

SUPPORT educators to develop positive dispositions and mathematical confidence in themselves and others as users of Mathematics.

ENCOURAGE AND SUPPORT participants to engage in inquiry into practice through collaborative networks.

PROVIDE high quality resources that encourage and promote the development of mathematical understanding.

ENABLE access to all educators of Mathematics.

“ *I would like to know more about the findings of research and how it changes/impacts on current classroom practice.* ”



Copyright © AAMT 2013

This document may be reproduced for non-commercial educational purposes.

This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License.

<http://creativecommons.org/licenses/by-nc-nd/3.0/>