

Building Mathematics Teaching Leadership Capacity

Page Index

[Description](#)
[Participants](#)
[Findings](#)
[Outcomes](#)
[Impact](#)
[Related Documents](#)

Quick Links

[Download Infosheet](#)
[Download Report](#)
[Visit Website](#)

Project Title	Building Mathematics Teaching Leadership Capacity in an Isolated Tasmanian School Cluster
Project Team	3 schools, 38 teachers, 5 professional learning (PL) providers, Department of Education, Tasmania
Period	2007
Funding Agency	SiMERR and AAMT
Organisational Base	SiMERR Tasmania

Description

[↑ Top](#)

Models of professional learning (PL) that are effective in urban areas are often not effective in rural and remote areas. It is both expensive and disruptive to send teachers out of school. There is clearly a need to explore different and innovative ways to meet the professional learning needs of teachers in rural and remote areas.

Aims of the project included:

- To provide support for teachers of mathematics in a cluster of remote Tasmanian schools;
- To develop mathematics curriculum leadership in the area; and
- To raise the profile and impact of the Mathematical Association of Tasmania (MAT) and the Australian Association of Mathematics Teachers (AAMT) in the area.

A cluster of three rural schools agreed to participate in the project. An initial two-day visit to the cluster was used to collect data on the needs of teachers in the schools. This was achieved via a comprehensive questionnaire that incorporated parts of the AAMT Professional Standards Self Evaluation. Based on the questionnaire data a team of five PL providers was organised and rostered to provide a total of 10 person days of PL in the cluster. The PL providers worked with mathematics teachers of grades K-10, spending time in individual classrooms, working with individuals and/or small groups of teachers throughout the school days, and with teachers from the cluster of schools in after-school sessions. Teachers committed to implementing negotiated changes in their mathematics teaching and to providing evidence thereof, e.g., maintaining a journal and collecting work samples.

Interviews with the principals and each of the PL providers were conducted following the PL week and a second teacher questionnaire and follow up interviews with the teachers were carried out to determine if changes had been made to their practice.

The project paid registrations for four teachers from these schools to attend the 21st biennial conference of AAMT in Hobart in July.

Participants

[↑ Top](#)

3 schools, 38 teachers, 5 professional learning (PL) providers, Department of Education, Tasmania

Findings

[↑ Top](#)

- There was a high participation rate with principals being very positive, but schools varied in the extent of their commitment to the project. For example, one school paid relief so that its teachers could be more involved.
- There was a tension between providing a range of expertise (five experts) and the level of organization needed to accommodate this in a responsive way to teacher needs.
- The difficulty that teachers experienced in identifying their PL needs created a tension for the providers in planning suitable activities. There is a balance to be struck between being responsive to teachers' needs and simply planning activities that are likely to be beneficial based on the literature and PL providers' experience.
- Time constraints on schools meant that they selected the first week of Term 3 for the PL week, which meant that teachers and principals were not available for liaison/clarification with PL providers in the two weeks immediately prior to the PL week.
- The project identified potential mathematics curriculum leaders but the duration of the project was insufficient to make substantial progress in terms of their development. The model trialled here could be effective in the role provided

schools supported potential leaders by providing meaningful roles within individual schools or the school cluster, and support from out of area leaders was ongoing.

- Principals and teachers identified a number of advantages of the model over traditional PL models. These included:
 - The opportunity to involve all staff with the shared experience creating a “buzz” in the school around mathematics;
 - The opportunity to spend extended time and /or multiple sessions with professional learners with recognised expertise;
 - Ability to tailor the professional learning to the needs of individual teachers;
 - The opportunity for professional learners to work with teachers in their contexts, including teaching their classes – teachers could see that ideas worked with their students; and
 - Reduced school and class disruption since teachers did not need to leave their classes.

Outcomes

[↑ Top](#)

- Beswick, K. (2007, November). Building the mathematics teaching and leadership capacity in an isolated Tasmanian school cluster. Poster presentation at the National Summit of the National Centre for Science, Information and Communication Technology, and Mathematics Education for Rural and Regional Australia, Canberra, ACT.
- Beswick, K. (in preparation). Taking professional learning to isolated schools: The potential of an innovative professional learning model.

Impact

[↑ Top](#)

The professional learning delivery model trialled in this project has potential to meet the needs of teachers in rural and isolated schools more effectively than traditional models.

Recommendations include:

- That the PL providers visit the schools to meet face to face with the teachers with whom they will be working prior to the intensive on site delivery phase;
- That the PL providers engage in at least two week-long visits that are spaced to allow teachers the opportunity to attempt changes to their practice and to improve both support and accountability; and
- That systems ensure that sufficient numbers of people with appropriate expertise are employed and are available to work with schools and teachers.

Further research, funded by an Institutional Research Grant from the University of Tasmania and using a related model, is currently being undertaken.

Related documents

[↑ Top](#)

Click [here](#) to download this infosheet.

Click [here](#) to download the report on this project.

Click [here](#) to visit this project's website.

[↑ Top](#)