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There is concern in Australia about outcomes of school mathematics in rural areas. Diminishing numbers of students undertake post-compulsory mathematics study; relatively low numbers of rural students participate in higher education mathematics courses; rural students have lower results on the PISA test than the national average; and it is hard to attract qualified teachers to rural areas. This is clearly an equity issue.

An Australia wide research and development project is supporting mathematics in rural areas across Australia. This poster addresses issues noted during 15 focus group meetings of teachers, students, and parents in four Victorian rural schools.

While teachers, parents and students all spoke of lifestyle advantages of regional living, they are frustrated at the level of resources and support. The lack of a professional community of mathematics teachers was noted, as well as their relatively poor qualifications. Most students expect to undertake tertiary education, but in fact relatively few students from rural areas progress to university. Although not having completed secondary education themselves, many of the parents saw their children as ideally studying at university. Some were able to relate the needs of the farming community to a good grounding in mathematics. In contrast, the pull of a football career was noted to be great for boys in rural areas. It was noted by teachers that if parents had the financial resources to send their children to boarding schools in urban areas, then they were more likely to do well in mathematics, and it has been shown that these children do actually perform at a higher level on statewide testing than the mean scores for students in rural locations who attend their local schools.

When asked to talk about mathematics, students responded positively. Two factors seemed to feature in students' attitudes: satisfaction at success or feelings of competence; and appreciation of mathematics that was done in relevant contexts. The building of individual confidence was regarded as significant, as was catering for individual needs. There was, however, concern expressed by both parents and teachers that more rural teachers needed to have strong maths discipline knowledge. They commented that it was difficult for rural staff to attend special events such as excursions and mathematics competitions and that teachers are reluctant to attend professional development activities, as qualified relief teachers cannot be found.

Class sizes in secondary schools were regarded as both a benefit of rural education, and problematic. While providing increased opportunity for individualised instruction, some schools found the need to combine different year levels in the same mathematics classrooms disadvantaged the more advanced students. There is difficulty in maintaining a critical mass of academically committed students.