

# LOCAL SOLUTIONS FOR LOCAL PROBLEMS: ADDRESSING TEACHER SUPPLY IN RURAL COMMUNITIES

**Russell Yates**

**The University of Waikato  
Hamilton, New Zealand**

## ABSTRACT

*Teacher shortage in rural localities is a long-standing issue in New Zealand. This paper reports on an attempt to reduce the impact of shortages by redesigning the way pre-service teacher education was delivered. Called the Mixed Media Programme (MMP), this is a primary (elementary) teacher education programme that was established in 1997 in New Zealand by the University of Waikato. It was initially introduced to rural areas of the North Island of New Zealand. It continues now as a viable and accessible flexible option for teacher education and is a significant means of ensuring better teacher supply in numerous rural areas. The programme uses a combination of face-to-face teaching; school based learning activities and electronic communication. There is an annual intake of about 60 student teachers, most of who study at home in their local area.*

*Now in its tenth year, the programme has produced more than 400 graduates, many of whom are still teaching in schools throughout New Zealand. This paper reports on a small-scale study, which sought to examine the way that student teachers, teachers and school principals from two communities perceive the programme and its effects on these communities.*

*School principals, teachers, graduates and current student teachers were asked about the way that the programme has enabled people from local communities to firstly study to become teachers in these communities and then to teach in them. Their views show that student teachers have found this approach to teacher education very beneficial to local communities for a number of reasons, including stable staffing for schools, commitment to teacher education programmes, confidence about the quality of the graduates they employed. The student teachers reported that they were able to become teachers without having to leave their local communities, were exposed to university education as mature student teachers and that their study has had a range of effects on them and their families.*

*It can be concluded from the evidence that the Mixed Media Programme has had important positive effects upon the two small communities of the study, at individual, school and wider community level.*

## INTRODUCTION

The issue of teacher supply is of continuing concern to education authorities in a number of parts of the world. Studies in Australia and the United States (Halsey, 2005; Buckingham, 2005; Hill & Hirshberg, 2006) suggest that authorities continue to grapple with teacher supply, especially in rural areas, and indicate that this problem is not likely to ease in the near future. New Zealand experienced a serious teacher shortage over a number of years from about 1995, and although statistics do not indicate a current shortage over the whole nation, it is evident that the issue of teacher supply continues to be a major one for New Zealand education authorities, especially in rural communities.

A response to the teacher shortage of 1995 and the ensuing years was mounted by the University of Waikato. This paper reports the results of a small study of the university's response called the Mixed Media teacher education programme (MMP). The study was conducted because anecdotal evidence suggested that the Mixed Media Programme had been successful in meeting its objective of assisting small and rural schools to achieve greater staffing stability. The anecdotal evidence also suggested that the programme had presented effects which were unintended at the outset of the programme but which had turned out to be quite significant for the schools, student teachers and communities involved. The unintended outcomes included a 'sense of sharing' with the student teachers while they undertook their teacher education, a heightening of professional development awareness for the teachers in the participating schools and a role modelling effect within families and communities of the MMP student teachers.

Data were collected in two case studies to investigate the effects of the programme upon two rural communities. While there have been more than 100 schools involved with MMP two particular schools were selected because both had a long involvement with the programme and were representative of the type of school which had participated. One school is located in a small rural community of around 300 people, whilst the other is located in a small town of about 5000 people. Interviews were conducted with the principals of two schools, 8 former MMP student teachers who had become teachers in the schools and 5 current MMP student teachers. The interviewees participated in semi-structured interviews and were asked about the way the programme had affected them and their schools, the way it had affected their families and the perceived effects on their local communities.

## **BACKGROUND**

If you were to look at the composition of many rural communities in New Zealand, you would probably find that almost all of them would have a former teacher in their midst. It is even more likely that the former teacher would be a woman who had been placed in that community as a young teacher. Many of these women married a local farmer and remain in that community to this day.

Young teachers were in rural communities because all new teachers were placed in teaching positions by an external authority. Schools did not appoint their own staff. Furthermore, all teachers were required – by national policy – to teach several of their first few years as “country service” to qualify for salary promotion. This requirement was abandoned in the 1970s. Regional education boards were the employing authority of all primary school teachers in New Zealand until 1989 when the boards were disestablished. The reform of educational administration, which was enacted by the Education Act of 1989, placed the responsibility for employment matters on each school's Board of Trustees. Boards of Trustees, comprised of elected local community members, were given the responsibility to govern their local school and the appointment of principals and teachers has been carried out by Boards of Trustees since that time. This system of appointment is different to that of other countries such as Australia and the United States where external systems of appointment still operate. Many principals and teachers in New Zealand primary schools would say the ability to appoint their own staff has been one of the outstanding advantages of self management enabled by the reforms of 1989. On the other hand the absence of an external authority presented other problems in New Zealand.

While the ability to appoint principals and teachers has been signalled by many principals and Boards of Trustees as an advantage it is also possible that it has been a significant disadvantage. This is because the staffing of all schools is now the responsibility of each Board of Trustees, which does not have the overall picture of staffing needs that the previous education boards had. This means that small, rural, often isolated schools have been essentially left to their own devices to attract and retain staff. Prior to 1989, an education board, which had an overview of staffing and the ability to direct teachers to teaching vacancies, would place teachers where the need arose. Since then each school has had to do that for themselves and many small schools have struggled to find teachers.

In 1995 a staffing shortage was very evident in many New Zealand primary schools. Primary schools in particularly rural areas of the North Island of New Zealand, consistently found difficulty in staffing their schools. It was not just the way that teachers were appointed that led to this situation. An increase in primary school rolls, an aging teacher population and a reluctance of many teachers to move to and stay in rural areas were all significant factors. Roll increase is no longer the issue it was but the other factors still exist and will probably continue to do so. A similar situation is still faced in Alaska where Hill and Hirshberg (2006, p.1) comment that retention of teachers is a continuing problem but that the migration of teachers and teachers leaving teaching are greater problems than the increased rolls and aging workforce.

Because of this situation, principals throughout the region served by the University of Waikato asked the School of Education (the university school responsible for teacher education degrees) to consider providing teacher education in the more rural areas. The principals based their request on a previous small-scale teacher education programme, which had been centred on two small towns on the East Coast of the North Island. The earlier programme had involved university staff travelling to the two centres on a regular basis to work with local people who had become student teachers in the programme. Between them, the two programmes had provided about 40 teachers and, in 1995, many were teaching in the areas surrounding the centres. Thus, the principals were keen to see a repeat of the programme in that form. They believed that the use of local people was a positive response to their need and one which was likely to be more lasting than seeking to appoint teachers from elsewhere.

However, the University of Waikato took a slightly different view of the way in which the programme should be provided because of previous experience in delivering the programme. It was accepted there was a need for teacher education in the hard-to-staff rural areas but the costs per student were higher than for on-campus student teachers. The previous programme had been very staff intensive in terms of both time and travel, and, in some ways, could have been unsafe for staff because of the travel distance and time constraints. Liability for staff was, therefore, an issue. Thus, the University of Waikato decided that a programme of teacher education would be developed that would largely overcome these drawbacks. It was designed for student teachers in small, rural and remote places, and would use new approaches to technology to minimise travel, and would enable student teachers unable to travel daily to temporary university campuses (outposts) to become teachers in their local areas. The intention was to address the teacher shortage in these areas by using people who were qualified to enter the degree programme who already lived there and were more likely to stay and teach in their local community.

This approach is in contrast to some other approaches, which have used measures such as incentives to ensure greater recruitment and retention of teachers for rural schools. The “country service,” referred to earlier, was an incentive for teachers to teach in rural areas but its removal saw less certainty in rural school staffing. More recently, a New Zealand Ministry of Education Report (2001) details measures that have been taken such as incentives for “hard-to-staff” schools and scholarships in specific areas such as rural education and curriculum subjects. Each of these approaches has worked in its own way and in its own time and has met the needs of the time but has not had universal success. The current approach undertaken by the University of Waikato is another way of addressing the problem. It may well face the same fate as other approaches, including incentives, but current evidence suggests it is an approach, which is working for local communities.

In 1997 the first group of student teachers in the Mixed Media Teacher Education Programme (MMP) commenced their studies towards a Bachelor of Teaching degree. The MMP programme is a replica of the University of Waikato’s primary Bachelor of Teaching on-campus. It is a three year full-time equivalent programme and currently comprises 20 papers (360 credit points). While most study is done from home, student teachers attend three week long block courses each year at the university campus in Hamilton, spend one day each week in their local school called a ‘base school’ while their main link with the university is through their computer. They also carry out one practicum block each year. The programme generally requires that at least two of their practicum experiences be in schools other than their ‘base school.’ This was insisted upon in an attempt to ensure that the programme was not seen as being insular and that student teachers were exposed to the broader issues of education.

One of the initial issues was whether the programme would attract suitably qualified student teachers. This concern was unfounded because a feature was the high calibre of student teachers selected for the initial intake. The student teachers that commenced in 1997 were selected following an extensive and contested selection process where there had been five applicants for each place. The selection of student teachers was overseen by the university but also involved local communities. The local communities were given no special consideration to ensure they were assisted in their staffing needs. Each applicant was required to meet the same selection criteria as for all New Zealand pre-service teachers.

The initial intention of the University of Waikato was to commence the programme by trialling it with a small group of 25 student teachers drawn only from the Gisborne and East Coast areas. However, the principals’ network throughout the whole geographical area served by the university was wide enough to soon know that such a programme was being established and principals from the other areas exerted enough pressure to encourage the university to reconsider and accept a larger intake from a wider area. Thus, 54 student teachers commenced the programme in February 1997. Not surprisingly the implementation of this new version of the degree presented many challenges, such as training university teachers in the use of online teaching techniques and new ways of relating to their student teachers. Long accepted practices were challenged. However, the focus here is upon the wider effects beyond these early implementation issues: how has this programme impacted upon schools, communities and student teachers?

## WHAT HAS BEEN THE EFFECT OF MMP?

In the time that the programme has been available almost 600 student teachers have enrolled and more than 450 have graduated with a teaching qualification. While not all graduates have chosen to teach, the majority have taken up teaching positions throughout New Zealand, and especially in their own or nearby rural districts. There suggests an attrition rate of about 25% and while this is not an alarming rate it has grown from the initial intake rate which 4% attrition. With this picture in mind a small-scale study was undertaken to discover how two schools have been affected. Anecdotal evidence suggests that the findings from these two schools are likely to be relevant to other schools. The two schools were chosen because they have been participants in the programme since its inception, both as base schools for student teachers and as employers of graduates.

School A is located in the east of the North Island in a smallish rural town, which has four primary schools and one secondary school. Staffing has been an issue for School A since 1989. The town has a population of about 4000. (Census, 2001) The ethnic distribution is 52% European and 48% Maori. (Census, 2001) The school has a current roll of 183 with 7 classrooms. The school roll has been consistent for the last ten years. The school has 3 former MMP student teachers currently teaching in the school. Two were student teachers in the 1997 intake and the third has taken up a position this year, having completed her teacher education in 2005. The two 1997 intake student teachers were 'teacher aides' (Ancillary Staffing) in the school prior to their selection and continued in that role throughout their period of teacher education. The two 1997 intake student teachers have only taught in School A.

School B is located in a small village also in the east of the North Island but further south than School B. As with School A, staffing has been difficult mainly because teachers who had taught in the school prior to MMP have often stayed only briefly before moving on to, or back to, larger centres. The village has a current population of 330, of whom 73% are of Maori ethnicity and 27% European. The school has a roll of 129 with five classrooms. The school staff currently has three graduates from the Mixed Media Programme, one from the 1997 intake, one from the 1999 intake and one from the 2001 intake. The two student teachers from the earlier intakes taught in schools other than School B before moving to their current positions. Both live locally. In addition, there were two other student teachers in the 1997 intake that completed their teacher education whilst being 'based' at School B. One of these teachers is employed in a school near School B, while the other is now successfully teaching in another country.

In this study the two school principals were interviewed along with some of the current or past participants in MMP. Principals were asked about their experiences and views regarding MMP: time involved with MMP; their original impressions of what MMP might achieve for their school community; what MMP has achieved for the school community; benefits for teachers; advantages and disadvantages of MMP and any other effects.

Teachers were asked about what motivated them to become teachers through MMP; what was achieved for them personally by becoming or preparing to become a teacher

through MMP; the challenges faced as an MMP student; and effects on family and, or, community.

### **School involvement with MMP**

Both principals were initially involved in the Mixed Media Programme as a host school at least one student every year since the programme commenced in 1997. That had meant the schools had acted as 'base schools' with student teachers attending one day each week to participate in school activities related to their study. The learning content and study activities of the degree were determined by the university and communicated to the school via the student teacher. Each student had a mentor teacher known as a 'coordinating teacher' who was the 'constant' for the student teachers. The principals of both schools indicated that teachers in the school were more than willing to act as 'coordinating teachers' and one principal suggested that at times it almost became a contest to act as the mentor. The reason for that willingness was that in most cases, the mentors already knew the MMP or potential MMP student as a community member, and knew what they were capable of. The schools were financially compensated for their work as base schools in providing mentoring and access and while both principals agreed that this was an appreciated consideration, they also said that many of the teachers involved saw it as a professional opportunity and responsibility. Indeed the amount of money was modest and teachers contributed more than the money might have justified.

One of the side effects of the student teachers being placed in 'base schools' was the way that the qualified teachers in the 'base schools' responded to the presence of teacher education student teachers. In both cases a heightened awareness of the potential of professional development was kindled and the qualified teachers were influenced to pursue other qualifications of their own. For School A this meant that some teachers began to actively study for degree qualifications and did so online. The opportunity to study in this way was prompted by the presence of the teacher education student teachers studying online. At School B this manifested itself with the teachers and teacher education student teachers together studying papers at another institution. For the teachers this was based on the school development focus but for the student teachers it was a way of broadening their teacher education programme, an indication of their commitment as these papers were not credited to their initial teacher education programme. This was an outcome that was not predicted at the outset of MMP. Both principals agreed that the impetus of the programme had significantly advantaged their staffing needs since MMP student teachers had graduated. Both schools had appointed MMP graduates immediately on completion of the graduates' study. They suggested that they had made the appointments for two reasons. One was that they knew the graduating student teachers capabilities very well and had confidence that they would be suitable as teachers. This was fortunate since the second reason they were appointed was a lack of other applicants. In fact, the principal of School B said that there were no other applicants for the advertised position at that time. The principal added that the school had no initial qualms about appointing an MMP student. Their optimism has been borne out; School A, for example, appointed two graduates who continue to be valuable members of staff of that school.

## The effect on local communities

Another aspect of effects was the possible spin-off for local communities. The effect of MMP on the two school communities varied. School A, the larger community, felt that the effect did not spread into the wider community to any perceived extent. In School B both the principal and student teachers felt that their involvement in MMP was noted and did have an effect. The principal of School B suggested that their school community quickly recognised the value of involvement at school governance level with their Board of Trustees consistently affirming the school's continued involvement.

The student teachers at School B also suggested there was a wider effect. One student teacher said:

*This is the biggie to me. It has provided huge 'in-your-face,' 'we-know-her,' role model within the community, for both 'pakeha' and 'Maori' people. The lady I mentioned earlier, who wanted to train as a nurse was able to do so because (training institution) in (local area) did take on her suggestion after her insistence that (local area) people could train at a distance. Two men have become policeman as they said they could change careers or get a career, just as they have seen others and me do. I have seen one family man leave the police and take on an adult apprenticeship. He said, "You are the role-model you have shown the way, and you are still changing and adapting work to your family demands."(StudentB2)*

This is indicative of the effect of the programme especially when it is considered that the student who made the comment was one of the 1997 intake and since then there has been a continuing flow of applications for MMP from the School B community. All student teachers agreed that they were seen as role models although one (Student B1) suggested it might not be as great for him as for other student teachers because of his low profile. A further effect of MMP, which needs to be considered, is that of raised income and qualification levels. The principals of the two schools agreed that the success of student teachers in gaining teaching qualifications had an effect on the student teachers, their families and their wider community. Many of the communities involved with the MMP programme are relatively low socio-economic communities. That is true of the communities for Schools A and B.

School A is located in a town where the median income (2001 Census) was listed as being 60% of that for all of New Zealand, while School B has a 'village' median income of about 62%. In educational qualifications the town of School A has a median population of 20.2% who are aged greater than 15 and who have a post school qualification compared with 22.3% for their wider area and 32.2% for all of New Zealand. The community of School B has a median population of 21.7% who are aged greater than 15 and who have a post school qualification compared with 21.6% for their wider area and 32.2% for all of New Zealand. While it is acknowledged these figures are not conclusive, it would be fair to conclude that the input of five university degrees to the community of School A and six to the school community of School B would have an impact on both income and qualification levels especially when a New Zealand Beginning Teacher commences on a salary which is about 120% of the average New

Zealand income. The greater wealth, financially and educationally, is likely to affect each school community.

### **The effect on student teachers and their families**

All student teachers interviewed about the programme described major effects on their lives and those of their families. They saw that it had given each of them worthwhile careers and an opportunity to contribute meaningfully to their local communities. They suggested it had given them confidence in their own ability and some very strong work habits during the period of study. One student (B2) suggested that she had gained in a range of ways – an ability to use a computer, an ability to ask questions and ask for help and a wider circle of friends gained from her times of study. Student teachers also reported that there had been an effect on their families in that the families gained pride from the achievements of the student teachers as well as children finding encouragement from the efforts of their parents. This pattern of effects is similar for all student teachers that have been part of the Mixed Media teacher education programme.

### **CONCLUSION**

The Mixed Media teacher education programme was established to address teacher shortages in rural areas. The study shows that MMP has contributed to that objective in the two communities studied. However, strong anecdotal evidence suggests that the effect of MMP is much wider in that many schools outside this study report similar results for their schools from MMP. It has provided greater continuity of staffing with teachers who know their area, who are well trained and who will probably live, and work, in their communities for much longer periods than many previous teachers did. It is a positive step in ensuring that schools have teachers who are likely to be effective in and have empathy with their community. This is especially important for both of these communities, which have significant Maori populations. The experience of MMP suggests that using teachers from communities may have benefits for achievement through appropriate staffing, a point supported by Hill and Hirshberg (2006, p.30) when describing efforts to retain teachers in rural Alaska. They comment, "...one reason for recruiting Alaska Natives to become teachers is that they have ties to Alaska. We hope that by preparing teachers who have personal, family and cultural ties to Alaska in general and rural Alaska in particular, some of the forces that now contribute to high turnover (distance from family, friends and home) will work to reduce turnover." A similar programme has been conducted by Deakin University in Australia for Aboriginal communities (Buckingham, 2005, p.7) so there is an indication of successful approaches. In New Zealand, MMP has shown, in the two schools of this study and most likely many more who have also been involved, that it is possible and successful to obtain teachers from within local communities.

The school-based approach used by MMP is not totally unique although the fact that it was the first online teacher education degree in New Zealand is unique. It is an approach similar to School Based Teacher Education (SBTE), which has been part of the teacher education scene in Australia and the United Kingdom for some years SBTE has attracted varying reviews partly because of higher per student costs and difficulty in sustaining such programmes. The experience of MMP suggests that, like other SBTE programmes there are higher per student costs but that a carefully constructed programme such as MMP is able to deliver strong benefits to local communities.



The study confirmed that the two schools, their school communities, student teachers and families have gained in a number of ways, all of which have advantages for each party. Schools were clear that they gained from having student teachers in their schools. They saw them as important sources of professional motivation and development and as willing colleagues. The continued presence of the teacher education students as teachers provided an important sense of role modelling for communities. Both schools and student teachers commented that they saw their teacher education period as one, which developed new openings for them.

When the programme was commenced there were some initial fears about the potential for insularity. It was thought that if teachers were trained in their local communities and did not have a wider picture, the quality of their teaching would be lessened. There is no evidence that the programme is insular as the continued employment of graduates in their local and wider areas suggests that the quality of their teacher education programme has enabled them to take a full part in the teaching fraternity.

MMP has been an important part of the life of school communities in the programme for the past ten years. It has brought much success. There are, however, on going issues that need to be considered in relation to policy on the MMP programme. The first of these is the need for continuing professional development. While some MMP graduate teachers have commenced graduate study to improve their qualifications, many are reliant on their schools for professional development. The need is for this to be wide-ranging and focussed on issues wider than just the local school, or the potential for insularity, which was an initial concern, could be a negative side effect.

The success of local people in becoming teachers has been applauded in their communities. It is seen as an important achievement for them, as individuals, their schools and their communities. Their success, however, could lead to false expectations on the part of other community members who may think that they too, could become teachers. The ideal of having a continuing supply of teachers from a local community is commendable. It does mean though, that teacher education institutions need to ensure those involved in the selection of new student teachers are clear that the potential student teachers have a reasonable chance of success.

Finally, this paper has described an approach to pre-service teacher education in New Zealand. It has shown that a programme, which incorporates school based teacher education with the traditional notion of university-based teacher, is able to deliver a sustainable supply of teachers in local communities. Such an approach is transferable from country to country and may be an approach worth considering for rural areas in other parts of the world.

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