

LAM08724: The Shortage of Teachers and its Impact on Sustainability Education:

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Introduction

The current worldwide shortage of teachers has serious implications for nations attempting to implement education for sustainability. The inclusion of universal primary education as the second of the UN Millennium Goals was a recognition that education plays a crucial role in the alleviation of poverty, the promotion of peace and security and environmental protection. The projected shortage means that programs aimed at improving knowledge of sustainable practices such as the Australian Sustainable Schools Program, the British Sustainable Development Action Plan for Schools or the Nepali Sustainable Community Development Program will be undermined, as the teachers required to deliver them may not be available.

Warnings about a shortage of teachers have surfaced periodically since the early 1990s and while there is no shortage overall, an analysis of the situation, region by region presents a very different picture (Santiago, 2006). Some of the most highly developed and the least developed nations will experience moderate to severe teacher shortages, particularly in areas of high demand such as maths and science. Unfortunately, wealthy nations such as the UK, USA and Australia tend to regard recruitment of teachers from overseas as the easiest solution to the problem. Overseas recruitment is not a bad solution, so long as it is done ethically and understood to be a temporary solution; in Australia recruited maths and science teachers from the USA in the 1970s to staff laboratories and classrooms funded by the recently created Commonwealth grants (Connell, 1993), Zimbabwe recruited teachers from Australia and the UK to cope with the huge influx of students following majority rule in 1980 (Atkinson, 1982) and Cambodia used a mix of volunteer and contract teachers in 1979 to replace teachers killed by the Khmer Rouge regime and again in the early 1990s to relieve temporary shortages caused by changes to recruitment and training policies (Duthilleul, 2004).

Recruiting teachers from the less-developed nations such as the African and Caribbean nations to fill positions in wealthy countries is not sustainable in the long term. The loss of capital invested in skilled personnel has a very serious impact. The ILO estimates that 50-80% of tertiary educated citizens from some of the smaller African and Caribbean nations now live abroad (Rattree, 2006) which represents an enormous loss of both economic and social capital and a major impediment to the achievement of social or environmental sustainability. Teachers enable to their students to discover many aspects of the world that would be otherwise unknowable and the consequences of their loss extend far beyond the classroom walls. Teachers are often highly-valued members of the community who occupy a wide range of leadership roles, particularly in rural areas where other professionals are seldom found. Losing their knowledge and skills is a danger to national and regional stability since lack of education is inextricably linked to poverty, and consequently to ill-health and unplanned population growth (UNESCO, 2000). Families who see no alternatives are more likely to engage in behaviours that are inimical to community life and the development of civil society: child-marriage, debt-bondage, human trafficking and the cultivation of narcotics can all be linked with poverty (Demombynes & Özler, 2005) and although there does not appear to be a direct link to terrorism, turbulent societies that are struggling to deal with internal problems may provide convenient, if unwitting hosts (Krueger & Malečková, 2003).

The alternative is for developed nations such as Australia examine their own policies and practices in regards to the recruitment and retention of teachers (Commonwealth of Australia, 2007). In particular, the need to investigate ways of attracting “non-traditional” applicants including graduates who might take up teaching as second career.

Aims of the Project and Research Methods

This paper reports on a research project undertaken at Australian Catholic University to investigate why applicants to preservice education courses had decided to give up their existing, and in many cases successful, careers in order to become teachers.

The project was undertaken in two sections: an initial pilot study and a second study of recent graduates. The pilot study used a questionnaire was based on one developed by the Australian College of Education in 1979 to explore teacher’s professional experience and community engagement.

This questionnaire was modified to include questions relating to reasons for becoming a teacher, attitudes to teaching and reasons for considering leaving teaching which were drawn from the literature search. This questionnaire was disseminated as widely as the accessible data allowed to graduates who had been teaching between two and five years.

A total of 257 graduates from both primary and secondary preservice education courses were invited to participate in the initial pilot study with the intention of securing a sample of 30. In fact, this target was exceeded. The sample was thirty-one: twenty-eight (90 per cent) were female and three (10 per cent) were male. Around two-thirds were secondary teachers (68 per cent) while the remainder (29 per cent) were primary teachers. One teacher (10 per cent) was over fifty years of age, six (19 per cent) were in their forties, nine (29 per cent) were in their thirties and thirteen (42 per cent) were less than thirty year of age. At this point a questionnaire was posted to each participant with a return envelope. The results were analysed using SPSS 15.0.

The initial pilot study used open-ended questions to map motives for changing career, to test the hypothesis that career change teachers might be less likely to remain in the profession and to investigate the factors that might prompt them to leave the profession. Answers to the open ended questions in the pilot study were used to frame questions in the second questionnaire.

Although, the primary purpose of the second part of the study was to develop a research instrument capable of collecting data from a large number of respondents planned for a later date, it also enlarged the data set by including responses from a group of twenty-one recent graduates from the Graduate Diploma in Education (Secondary). Respondents in both parts of the project were asked about their previous occupations, their qualifications, motives for becoming teachers, any difficulties they had experienced in making the transition to teaching and if they had left or had considered leaving teaching.

Results from the Pilot Study

Attraction to Teaching

The pilot study suggested that there were there are 3 categories or groups of reasons that might account for graduates working in another field to give up

their existing careers in favour of teaching. Table One indicates these reasons can be summarised as pragmatic, altruistic and personal. However, use of open-ended questions that allowed teachers to express their feelings at considerable length produced long and complex responses that often contained a number of apparently contradictory elements suggesting that the process of changing to teaching from an existing career is more personal and nuanced than previously described.

Table 1: Attraction to Teaching – Initial Pilot Study

	Reason given	Per cent
Pragmatic	Working hours	13
	Unhappy in previous job or wanted a change	19
	Needed a job	16
	Wanted a job that is portable	3
	Wanted a job that is compatible with family needs	13
	Wanted a job with professional status	10
Altruistic	Wanted to contribute to society	13
	Enjoy working with children	42
Personal	Exposure to teachers	16
	Wanted a job that is fulfilling	39
	It seemed like the right time to become a teacher	3
	Love of subject/discipline area	22

Pragmatic reasons included the need to find a job combined with a belief that teaching would be an acceptable choice. A subset of responses in this group identified the need to find work that would fit with family needs as a major factor. Altruistic reasons included a general desire to “give something back” to the community and a wish to work with young people. Often these responses included specific references to their love of their subject and a desire to share it. The last group was attracted to teaching for personal reasons that could be described as vocational in the religious sense. Teachers in this group felt drawn to teaching almost against their will or better judgment and often mentioned an interest in teaching that had been suppressed until a life-changing experience such as a major illness or death of a family member that had altered the course of their lives. For others, teaching came as a revelation; something they had not considered until they were brought into contact with teachers through a personal relationship of some type. However these results should be treated with caution. Use of open ended that allowed teachers to express their feelings at considerable length produced some complex responses that often contained a number of apparently contradictory elements suggesting that the process of changing to

teaching from an existing career is a more nuanced and personal one than previously described. Teachers often mentioned altruistic and pragmatic reasons in the same sentence; while the most frequently cited responses were a desire to work with children or young people (42 per cent) and a belief that teaching would be personally fulfilling work (39 per cent), thirteen per cent were also attracted by the hours and a further thirteen per cent specifically mentioned wanting a job that would fit in with their family responsibilities such as caring for children.

“**Holidays** (my daughter wrote that) ...I have four children and the holidays suited my lifestyle.” (formerly a research officer)

“I wanted a job that would lead straight into a job at the end of it ... I also like the hours (weekdays only, no weekends or nightshift).” (formerly a nurse)

Enjoyment

Teachers in the pilot study nominated a wide range of aspects of their work that were enjoyable, but as Table Two shows the majority of these related to working with young people and to sharing the process of learning with young people. This evidence is consistent with research into teachers’ attitudes to their work and job satisfaction stretching back over many years.

Table 2: Enjoyable aspects of teaching

	Aspect	%
Pedagogical	The challenge of imparting knowledge	3
	Empowering students	81
	Joy of working with children	77
	The excitement of sharing new discoveries	3
	The variety of tasks	16
Academic	Love of my subject area	23
Social	Having a connection with society	3
	Collegiality with staff	26
Status/reward	Wanted a job with professional status	3
	Pay	23
	Recognition by community	3

More than forty years ago, Kob (1961) argued that secondary teachers could be divided into two distinct groups: teachers who see themselves as playing

a major role in the social development of their students similar to a parental role and teachers who see themselves as scholars whose primary loyalty is to their discipline area. He also found that teachers who saw the primary focus of their work as helping young people to develop were more likely to have developed a strong commitment to teaching early in their careers, possibly before they completed their own secondary schooling. McLeish (1969) demonstrated that teachers across the entire breadth of the British Commonwealth shared a set of common attitudes and values regardless of the ethnic, cultural or socioeconomic background.

In fact, there seems to be a distinctly “teacherish” view of the world that is partly the result of the way in which they are socialised into the profession, but also stems from the personality and values of people who become teachers (Lacey, 1977; Hargreaves & Woods, 1984). Paterson (2000) was able to identify “a political culture that was distinctively theirs, and was not merely inherited from the broad social class into which they would be assigned by sociologists, and which could not be explained by other factors such as sex or age” (pp 114 - 115). Allowing for individual exceptions, teachers are idealistic, interested in people and ideas, but not especially concerned with status or income. West (2006) identified teaching as being one of the professions that attracts culturists, people who endorse traditional liberal-humanist values, have a deep belief in the importance of personal development and experience and who dislike the utilitarian approach to life. With some exceptions, the teachers in this study express opinions that are consistent with this research.

The exceptions to this overall pattern lend credence to Kob’s hypothesis that there are teachers who are predominantly interested in students and teachers who are predominantly interested in their discipline area. Twenty-three per cent of teachers stated that love of their academic discipline was something that attracted them to teaching, but less than half of that group appeared to be motivated by a strong desire to work with young people. Several of them stated that one of the best things about teaching was that it enabled them to use the knowledge and skills acquired through their own university studies:

I am passionate about biology and didn’t think of teaching at first ... (until) disillusion at what science graduates are paid (formerly a scientific research officer).

Laming (2006) found a similar streak of pragmatism among visual arts teachers who regarded teaching as an acceptable price to pay for access to professional quality studio equipment in schools.

Difficulty adjusting to teaching

Research into the phenomenon of second career teaching suggests that late entrants into the profession leave their former occupations for strongly felt reasons and enter the profession with optimism and a fair degree of confidence; they see themselves as having valuable skills and talents and look forward to making a positive change in the lives of their students (Bullough & Knowles, 1990; Chambers, 2002; Haggard, Slostad & Winterton, 2006). In general the results of the pilot study appear to confirm these elements, and it is worth noting that 35 per cent of the teachers in the initial pilot study reported no difficulty at all in adjusting to teaching and their comments reflected their pleasure in their new careers.

I had no difficulty adjusting – I found the opposite as I enjoy all facets of school life (former manager).

I took to it like a fish to water ... teaching is a two way process – you learn as you go along, we learn from our students (former aged care worker).

Loved it from the start; best thing I ever did (former lawyer).

Yet a majority (64.5%) of the teachers participating in the initial pilot study had experienced difficulty adjusting to teaching to some degree. Student misbehavior is often cited as a cause of teacher stress or job dissatisfaction (McCormick, 1987; Borg, Riding & Falzon, 1991; Brill & McCartney, 2008), but as Table Three shows the pilot study revealed a more complex picture of the causes of the difficulties experienced by career changing teachers.

Table 3: Causes of difficulty adjusting to teaching

	Reason	%
Personal	Amount of time involved	35
	Emotionally draining	16
	Very different to my previous job	32
Organisational	Curriculum demands	7
	Amount of preparation required	13
	Lack of mentor	3
	Lack of collegiality	10
	Poor pay in relation to work	3
	Poor quality, unsupportive management	13
	Poor working conditions/unfair practice	6
External	Parents	7
	State apathy/lack of resources	3

The results point to a significant degree of culture shock among career change teachers. Even the most enthusiastic of new teachers takes some time to adjust to the demands of full-time teaching, but career change teachers appear to face specific problems. Concerns over classroom management, student discipline and content were not common; the primary source of difficulty appears to have been differences between the organisational culture of their previous occupation and school culture (Powell, 1994; Haggard, Slostad & Winterton, 2006). As one teacher who had previously worked in tourism put it:

It is not teaching that is difficult, but the aspects of school systems that are not “taught” at uni. (It) takes time to adjust to specific school admin and staffroom politics.

Many teachers who participated in the initial pilot study were not prepared for the emotionally demanding nature of their work and commented on how exhausting or stressful they found working with young people.

...the energy that is required all day every day to deal with youth tragedies (formerly “other”)

It’s not a 9-5, 5 days a week job, its 24/7 (formerly in sales).

Much more responsibility, the job never finished and you are indispensable (in your own mind) (formerly a public servant).

A small number (13 per cent) were critical of school culture and blamed the school leadership team for their difficulties in adjusting to their new profession. Several teachers elaborated on what they perceived to be trivial rules that restricted their personal freedom in some way and contrasted this with their experience of working in business or a profession.

The other teachers were not like I expected, and I though the school management would be better (secondary: formerly a public servant).

Teaching and the Catholic Education Office are not as progressive as they think they are ...they are not very productive in advancing the image of teachers or creating good Human Resources structure for us to work in (secondary: formerly a sales manager).

The extent of teachers' unhappiness or irritation with the principal or school leadership team was directly related to the type work involved in their previous occupation and their level of seniority: not surprisingly, higher professionals, managers or the self-employed who were used to a high degree of autonomy in their previous occupations found the adjustment more difficult than salaried professionals such as public servants or research workers or people who were used to a structures hierarchy such as nurses. Their impatience with some aspects of school culture and their negative views of the school leadership which emerged more clearly in response to the next question about reasons for considering leaving teaching.

Leaving

Employment statistics suggest that recruiting teachers is significantly easier than retaining them in the profession and there is a body of evidence suggesting that career change teachers are less likely to remain in the profession than those who enter directly into undergraduate teaching degrees from school or into graduate programs from university (Bullough & Knowles, 1990; Murnane, Singer & Willett, 1998; Liu & Meyer, 2005; Chevalier, Dolton & McIntosh, 2007). None of the teachers in the pilot study had been teaching for more than five years, yet half of them had considered leaving. The results also showed a sharp increase from 2-3 years experience to 4-5 years. As Table Four shows, many of the issues identified in the question about difficulties adjusting to teaching resurfaced here and the reasons were discussed in more detail.

Table 4: Reasons for thinking about leaving

	Reason	%
Internal	Poor school leadership, unsympathetic school admin	16
	Poor student discipline	10
	Stress	6.5
	Hours of work	16
	Rigid workplace rules	10
	Lack of status in the community	10
	Insufficient pay for the work involved	10
	Wanted to pursue other interests	3
External	Started a family	6.5
	Could not get a job I wanted	6.5
	No answer	48

Coming from a variety of white collar and professional backgrounds, these teachers had not fully appreciated the how little autonomy they would have

within the school structure or grasped the relentless pace of teachers' work despite having spent a total of seven weeks in schools during their training. Another major cause of dissatisfaction with teaching was the quality of the school leadership. Once again, it was the teachers who had been self-employed, professionals or managers who were often highly critical of the principals' qualifications, management style and decisionmaking ability. Staffing allocations and demands on teachers' time were mentioned frequently and described as unfair or unreasonable.

The school had no discipline plan, a difficult class and a principal that would tell me what I couldn't do but no guidelines about what I could do (primary: formerly legal research officer).

I have been in 2 schools now with very poor human resource structures, no plan and some really poor decisions (secondary: formerly sales manager).

At times out of work demands are a joke (secondary: formerly sales assistant)

The existence of a substantial number of teachers who said they had thought about leaving, but gave no specific reason for their dissatisfaction suggests that this area needs more attention.

Expectations and Reality

Thirty-eight per cent of the teachers in the initial pilot study stated that the reality of teaching had not differed from their expectations a great deal. Table Five shows that the areas in which reality and their expectations diverged could be divided into three categories:

- Issues that had an impact on their personal or family life
- Issues arising from the organizational structure of teachers work
- Issues that originated outside their own lives or the school

Twenty-three per cent of teachers complained that work, in the form of preparation and corrections as well as the need to attend out of hours functions, impinged upon their personal lives to a considerable extent. A further ten per cent stated that work caused them to neglect their own families and children, citing instances where they had not been able to participate in activities involving their own children because of school commitments or of being too tired to enjoy family activities.

Table 5: Differences between expectations and reality

	Reason	%
Personal	Workload	23
	Neglected family	10
	Emotional intensity	20
Organisational	Career structure	6.5
	Amount of administration	26
	Discipline	3
	Other teachers	6.5
	Quality of leadership	10
External	Parents	13
	External pressures	3

As might be expected, many of the teachers who did not perceive a gap between reality and their expectations were people, who had had some exposure to teaching through family or community contacts, but a number of them had worked in teaching-related areas such as workplace training or childcare, or they had been classroom helpers at their children's schools. In fact a number of them indicated that this aspect of their work or life was the initial prompt that led to teaching.

I watched my children grow and pass through different stages and just thought what a great thing to do, to be part of such important work (formerly a nurse).

I loved being a flight attendant, then I got to a level of seniority where I was doing a lot of training. I had always sort of thought of teaching, but I didn't want to when I left school. As I got older I wanted to give something back ... I thought I could help the ones who needed a bit more support (formerly a flight attendant and trainer).

Further Developments

The initial pilot study opened the way for further investigation of two particular issues: the importance of home location in choosing a career in teaching and the role of religious beliefs. Just under twenty per cent of the teachers who gave highly pragmatic reasons for becoming teachers were living outside of the major metropolitan areas, and a further sixteen per cent were migrants: it was decided that these factors required further investigation to determine if there was a link between them and the decision

to become a teacher. Also, the participants in the pilot study were all graduates of a university grounded in the Catholic tradition. Many of them had gone on to teach in Catholic or other faith-based schools, some of them were teaching religious education and it was decided that the second pilot study should include specific questions about the importance of spiritual or religious beliefs.

The Second Pilot

Introduction

One of the aims of the pilot study was to develop a workable survey instrument that we would be able to use for a much larger project in future; open ended questions produce rich data but are impractical with cohorts of any great size. Consequently we used the comments made by the teachers who participated in the initial pilot study to develop a series of statements that could be scored using a Likert Scale. Several new questions were added to investigate a number of topics in more detail. A number of teachers in the first study had expressed a deep personal concern for the well-being of young people that suggested their approach to teaching went beyond wanting to work with young people. Exemplifying Kob's (1961) Type A teacher who regarded themselves as having a primarily pastoral role, their tone could be described as vocational in the religious sense. Two new statements were added to explore this attitude: "My religious beliefs played a role in my decision to become a teacher" and "I enjoy helping young people to grow towards maturity" was added to the question about the enjoyable aspects of teaching in an attempt to discover if this attitude was an aspect of the teacher's personality or arose out of their religious beliefs.

Three further questions were added in response to issues that had emerged from the results of the initial pilot study in relation to pragmatic reasons for becoming a teacher:

- Where were you living at the time you decided to become a teacher?
- Did your location play a part in your decision to become a teacher?
- Did the need to qualify for permanent residency play a part in your decision to become a teacher?

Contact details for sixty-two teachers, who had completed the Graduate Diploma in Education (Secondary) in 2005, 2006 and 2007 were available: twenty-one accepted our invitation to participate. Of those eight (38 per

cent) were male and 13 (62 per cent) were female. Two (9.5 per cent) were over fifty years of age, 1 (5 per cent) was over forty, seven (33 per cent) were in their thirties and the remaining eleven (52 per cent) were aged less than thirty. As in the initial pilot study, these teachers had held a wide variety of positions before becoming teachers that were not always clearly identified, however professional and administrative work being the most commonly cited occupations. More than half (58 per cent) stated that they had achieved some degree of seniority in their work describing themselves as team leader, manager, director or salaried professional. In general, their responses confirmed the results of the initial pilot study, but added a number of interesting insights on the issues outlined above.

Attraction to teaching

Changes in the format of the questionnaire make a simple comparison of the results from the initial and second pilots studies impossible, however it was expected that similar patterns of response would appear in the second study. Leaving aside the two additional questions mentioned earlier, responses to the question about attraction to teaching are consistent with the results of the initial pilot study.

Table 6: Attraction to Teaching – Second Pilot Study

	Attraction	Strongly Agree/Agree %
Pragmatic	Working hours	50
	Unhappy in previous job or wanted a change	40
	Needed a job	20
	Wanted a job that is portable	55
	Wanted a job that is compatible with family needs	55
	Wanted a job with professional status	45
Altruistic	Wanted to contribute to society	90
	Enjoy working with children	80
Vocational	<i>Wanted to contribute to children's development</i>	85
	<i>Influenced by religious beliefs</i>	31
Personal	Exposure to teachers	35
	Wanted a job that is fulfilling	100
	It seemed like the right time to become a teacher	10
	Love of subject/discipline area	95

As Table Five demonstrates, teachers are attracted to the profession because they want a job that is fulfilling, because they enjoy working with children and want to contribute to society. These results are also consistent with a very large study into motivation to enter teaching undertaken by Richardson and Watt, (2006). However this sample did not reveal a division between Kob's Type A teachers whose primary loyalty was to their students and Type B teachers whose primary loyalty was to their discipline area (Kob, 1961). On the surface, it appears that these teachers were almost all Type A, but in reality the situation is rather different. They did love their subject areas, but they also enjoyed sharing their knowledge with their students. Rather than being Type A or Type B, this particular group combined both.

Location had a clear impact in a number of cases, but the very small sample size makes it unwise to generalize about motivation: as many teachers living in country areas said that it did not affect their decision as said that it did. However, all but one of the four overseas born teachers in both studies, were happy to admit that securing permanent residency played a significant role in their decision.

Very little research has been done on the impact of teachers religious beliefs, one exception is Astill (1995) who found that the values of teachers in Christian schools did not differ to any significant degree from those held by teachers in other schools. Results from this study would suggest that Astill's hypothesis is correct and additional support for the suggestion that there is a set of values common to teachers (Hargreaves & Woods, 1984; Paterson, 2000).

Enjoyable aspects of teaching

Once again, the pattern of responses in the second pilot was consistent with the initial pilot. Table Eight also confirms much of what was said in response to the first questionnaire about what attracts teachers to the profession.

Table 7: Enjoyable aspects of teaching - Second Pilot Study

	Enjoyable Aspect	Strongly Agree/Agree %
Pedagogical	The challenge of imparting knowledge	100
	Empowering students	90
	Joy of working with children	85
	The excitement of sharing new discoveries	95
Vocational	<i>Helping children grow to maturity</i>	<i>81</i>
Academic	Love of my subject area	95
Social	Having a connection with society	40
	Collegiality with staff	65
	The variety of tasks	58
Status/reward	Wanted a job with professional status	35
	Pay	50
	Recognition by community	45

The implication emerging from these responses is that imparting knowledge by sharing discoveries is regarded as part of the process of helping students develop and mature. Extrinsic rewards, including pay, do not appear to be a highly motivating factor. This finding is also consistent with Richardson and Watt (2006). The professional status of teaching was also a contentious issue with at least one respondent arguing that teaching was not a profession at all while others indicated that their previous occupation was of equivalent professional status, if not higher status.

Difficulty adjusting to teaching

It is worth noting that an increase in the number of teachers who reported experiencing some difficulty in adjusting to teaching had increased from sixty-five per cent in the initial pilot study to seventy-five per cent. Once again, the differences between the organizational culture of their old workplace and schools was identified as a significant factor, but the emotionally draining nature of teachers work was the most commonly cited reason for difficulty in adjusting. A minority (27 per cent) had encountered what they regarded as unfair work practices in their schools, but a significant number (40 per cent) were critical of the quality of school leadership.

Table 8: Causes of difficulty adjusting to teaching - Second Pilot Study

	Source of Difficulty	Strongly Agree/Agree %%
Personal	Amount of time involved	80
	Interfered with personal/family life	60
	Emotionally draining	100
	Very different to my previous job	87
Organisational	Curriculum demands	13
	Amount of preparation required	60
	Lack of collegiality, no mentor	60
	Poor pay in relation to work	53
	Poor quality, unsupportive management	40
	Poor working conditions/unfair practice	27
External	Parents	40
	State apathy/lack of resources	47

At the same time more than half (60 per cent) felt that they had received appropriate support from their colleagues as they made the transition to teaching. As in the initial pilot study, responses to the question about difficulty adjusting to teaching were closely linked to their responses to the question about leaving teaching.

Leaving

An even greater proportion of teachers in the second study had thought about leaving. Around half of the teachers in the initial pilot study had thought about leaving by the end of their fifth year, but 63 per cent of teachers in the second pilot had considered leaving even though none of them had been in the classroom for more than 3 years.

Thirty seven per cent did not identify their reasons for contemplation leaving. Table Nine shows that among those who did, classroom discipline was the most commonly cited response. In this respect, teachers in the second study differed from those in the initial pilot where discipline was not regarded as a major issue. (Once again, it is difficult to generalize from such a small sample).

Table 9: Reasons for thinking about leaving - Second Pilot Study

	Reason	%
Internal	Poor school leadership, unsympathetic school admin	53
	Poor student discipline	84
	Stress	77
	Hours of work	61
	Unreasonable demands	46
	Rigid workplace rules	33
	Lack of status in the community	46
	Insufficient pay for the work involved	77
	Wanted to pursue other interests	46
	External	Started a family
Could not get a job I wanted		30
No answer		37

In reality, teaching is a highly demanding job that requires personal engagement with students, colleagues and school leaders at a deep level, making generalisations of this type difficult. Just as career change teachers' had complex, multi-layered and highly individualistic reasons for leaving their previous occupations and taking up teaching, they also had complex and individual reasons for leaving teaching or thinking about leaving.

I just found it so hard, the kids didn't seem to care and neither did the staff. The principal was no help. I left and got a job in another school at the end of my first year. I've never looked back – it wasn't me after all.

I'm working as an English teacher in the Philippines. I'd go back like a shot if I thought I could get a decent job.

Expectations and Reality

When asked about the differences between their expectations of teaching and the reality, sixty per cent of teachers in the second study answered by saying that there was not much of a difference at all. Cross-checking against biographical information and personal knowledge of these former students, it became evident that the majority had had some previous experience of tutoring, volunteer teaching assistant, teaching instrumental music or some form of youth related activity such as coaching. They were familiar with the school environment to some extent.

It was also pleasing to note that 35 per cent of teachers in the second study stated that teaching was better than they had expected. Nevertheless, Table Ten indicates that preservice teacher education programs need to find more effective ways to prepare their students for the reality of teaching in a school on an ongoing basis: preservice courses need to provide a clearer picture of the intensity of teachers' work and the amount of administrative work that teachers do need to be highlighted.

Table 10: Differences between expectations and reality - Second Pilot Study

	Reason	%
Personal	Workload	55
	Impact on personal/ family life	60
	Emotional intensity	80
Organisational	Career structure	25
	Amount of administration	75
	Discipline	45
	Other teachers	60
	Poor resources	25
	Quality of leadership	55
	Poor career structure	30
External	Little chance of promotion	25
	Parents	50
	Pressure from system/ministry	40

Table Ten also indicates that preservice teachers need more explicit advice about dealing with parents. Many of them had assumed that parents would appreciate their efforts but found that this was not always the case. As one teacher put it:

Mostly they're good, but some of them can be pretty bad ...
really demanding and rude, awful really.

Conclusions and Recommendations

Results of these two pilot studies suggest that career change teachers make the transition from pre-existing, apparently successful careers in order to take up teaching for reasons that are more complex and nuanced than much of the previous research has shown. At the same time, these studies have indicated that more research needs to be undertaken into the factors affecting retention. As the nature of teachers' work is changing in response to changes in the student population, the type of person entering the

profession is also likely to change (Mayer, 2006). This will, in turn, bring about further changes in the nature of teachers work. If we are to understand these two aspects of the situation, we will need to consider them in relation to each other.

It is likely that the types of applicants to preservice teaching programs are changing for a variety of reasons relating to the nature of teachers' work and community perceptions or expectations of teachers' work; the picture is not yet clear however work undertaken by Richardson and Watt (2006) indicates that number of mature age applicants for preservice teaching courses is growing. As a consequence, more teachers have had experience in other occupations, yet this experience is not always taken into account let alone valued (Bullough, & Knowles, 1990; Chambers, 2002).

Many of the comments recorded in these two studies expressing dissatisfaction with teachers' working conditions and school management practices could be interpreted as evidence that these career change teachers had not fully appreciated the nature of teachers' work or the school hierarchy before taking up a teaching position, and point to a need to re-examine the nature of preservice education programs. Career change teachers appear to need more targeted information about the scope of teachers' work and long-term mentoring programs to help them adjust to the demands of their new profession (Chambers, 2002; Haggard, Slostad & Winterton, 2006). However, the results of these studies also suggest that schools may need to modify some their procedures in order to attract and retain older, more experienced career change teachers. This study was not able to investigate principals' views of new teachers who come from professional or managerial backgrounds; however this is an area worthy of further study. It may be that principals and school administrators also need to be more aware of the backgrounds of their career changing staff to better understand what they may have left or given up in order to become teachers. Some form of recognition of prior learning/experience might also be in order to help mature age, career change teachers achieve promotion more easily or quickly so as to minimise the gap between their previous level of seniority and their status as beginning teachers. The process of developing and testing the questionnaire has produced an effective instrument and it is intended that the next phase of the project will generate a substantial quantity of data that will allow us to follow up the issues raised in the study.

So far, these two related studies have confirmed that many career-change teachers experience some degree of difficulty in making the transition to the

profession and that this is most strongly marked among teachers who had risen to senior level in their previous occupations and found it difficult to adjust to a relatively junior role within a school. In many cases, they felt that their existing expertise was discounted or ignored. More than half had considered leaving teaching, but in fact only a small per centage had done so at the time the data was collected.

Teachers are a vital component in education for a sustainable society, not just because they are a vital resource in the delivery of environmental education programs around the world, but because teachers are often key players in promoting and modeling socially sustainable behaviour and attitudes. In many developing nations they are often the only tertiary educated, professional occupation present; in small towns and villages their real work extends far beyond the classroom into all areas of the community.

The teacher shortage could be alleviated to a considerable degree through carefully targeted recruitment campaigns, but these must be accompanied by a reassessment of teachers' working conditions and career structures.

References

- Astill, B. (1995). *YES! Christians ARE different; but are their schools?* Paper presented at the Australian Association of Research in Education conference Hobart. Retrieved 2 August, 2005, From <http://www.aare.edu.au/95pap/astib95321.txt>
- Atkinson, N. (1982). Racial Integration in Zimbabwean Schools, 1979-1980. *Comparative Education*. 18 (1) 77-89
- Borg, M.G., Riding, R.J. & Falzon, J. M. (1991). Stress in Teaching: a study of occupational stress and its determinants, job satisfaction and career commitment among primary schoolteachers. *Educational Psychology*. 11(1) 59-75.
- Brill, S. & McCartney, A. (2008). Stopping the Revolving Door: Increasing Teacher Retention. *Politics & Policy*. 36(5) 750-774.
- Bullough (Jr), R.V. & Knowles, J. G. (1990). Becoming a teacher: struggles of a second-career beginning teacher. *International Studies in Sociology of Education* 3(2)101 - 112
- Chambers, D. (2002). The Real World and the Classroom: Second career teachers. *The Clearing House*. 75(4) 212-217.
- Chevalier, A., Dolton, P. & McIntosh, S. (2007). Recruiting and Retaining Teachers in the UK: an analysis of graduate occupation choice from the 1960s to the 1990s. *Economica*. 74 (293) 69-96.

- Commonwealth of Australia. (2007). *Top of the Class*. Retrieved 15 August 2007 from <http://aph.gov.au/house/committee/evt/teachereduc/index.htm>
- Commonwealth Secretariat. (2003). *Teaching at Risk" Teacher Mobility and Loss in Commonwealth Member States*. Oxford: University of Oxford Centre for Comparative and International Studies in Education.
- Commonwealth Secretariat (2006). *Teacher Mobility and Migration in Commonwealth Member States*, Submission to the Ninth Session of the Joint ILO/UNESCO Committee of Experts (CEART), Geneva, 30 Oct 2006
- Connell, W. F. (1993). *Reshaping Australian education 1960-1985*. Melbourne: ACER.
- Council for Education in the Commonwealth. (2004). *Achieving Universal Primary Education*. Retrieved 11 January 2007 from <http://www.cecomm.org.uk/home/>
- Demombynes, G. & Özler, B. (2005). Crime and local inequality in South Africa. *Journal of Development Economics*. 76(2) 265-292
- Duthilleul, Yael. (2004). *Lessons Learned in the Use of 'Contract' Teachers*. Paris: UNESCO Institute for International Planning.
- Haggard, C., Slostad, F. & Winterton, S. (2006). Transition to School as Workplace: Challenges to second career teachers. *Teaching Education*. 17(4) 317-327.
- Hargreaves, A & Woods, P (1984). *Classrooms and staffrooms: The Sociology of teachers and teaching*. Milton Keynes: Open University Press.
- Ingersoll, R. M. & Smith, T. M. (2003). The Wrong Solution to the Teacher Shortage. *Educational Leadership*. 60(8) 30-33.
- Johnson, K. A. (n.d). How Immigration Reform Could Help Alleviate Teacher Shortages. *USA Today*. 22-23.
- Kob, J. (1961). Definition of the Teachers' Role. In A.H. Halsey, J. P. Floud & C. A. Anderson. (Eds.). *Education, Economy and Society*. pp 558-576. New York: The Free Press.
- Krueger, A. B. & Malečková, J. Education, Poverty and Terrorism: Is There a Causal Connection? *Journal of Economic Perspectives*. 17(4) 119-144
- Lacey, C. (1977). *The Socialization of Teachers*. London: Methuen.

- Laming, M. M. (2006). *“Between the idea and the reality ... falls the shadow.” A Study of the Transformation of Young Peoples’ Attitudes to Education and Expectations of University*. Unpublished doctoral thesis. University of Melbourne.
- Laming, M. (2009). Education as a Method of Re-orienting Values. In J. Zajda & H. Daun. (Eds.). *Global Values Education: Teaching Democracy and Peace*. New York: Springer. (in press)
- Liu, X. S. & Meyer, J. P. (2005). Teachers’ Perceptions of the Jobs: A Multilevel Analysis of the Teacher Follow-Up Survey for 1994-95. *Teachers’ College Record*. 107 (5) 985-1003.
- Mayer, D. (2006). The Changing Face of the Australian Teaching Profession: New generations and new ways of working and learning. *Asia-Pacific Journal of Teacher Education*. 34(1) 57-71.
- Murnane, R. J., Singer, J. D. & Willett, J. B. (1988). The Career Paths of Teachers: implications for Teacher Supply and Methodological Lessons for Research. *Educational Researcher*. 17(6) 22-30.
- McCormick, J. (1987). An attribution model of teacher’s occupational stress and job satisfaction in a large educational system. *Work & Stress*. 11(1) 17-32.
- McLeish, J. (1969). *Teachers’ attitudes: a study of national and other differences*. Cambridge: Cambridge Institute of Education.
- Mugasha, F. (2006). *Statement on the Mid-Term Global Comprehensive Review of the Implementation of the Program of Action for the Least-Developed Countries for the Decade 2001-2010*. Retrieved 11 January 2007 from www.commonwealth.org
- Murnane, R. J., Singer, J. D. & Willett, J. B. (1988) The Career Paths of Teachers: implications for Teacher Supply and Methodological Lessons for Research. *Educational Researcher*. 17(6) 22-30.
- OECD (2005). *Teachers Matter: Attracting, Developing and Retaining Effective Teachers*. Paris: OECD.
- Powell, R. Case studies of second-career secondary student teachers. *Qualitative Studies in Education*. 7 (4) 351-366.
- Ratteree, B. (2006). *Globalisation and teacher employment: Teacher shortages, migration and mobility*. Paper presented at 16th Commonwealth Conference of Education Ministers. Cape Town, South Africa.

Richardson, P.W. & Watt, H.M.G. (2006). Who chooses teaching and why? Profiling characteristics and motivations across three Australian universities. *Asia-Pacific Journal of Teacher Education*, 34(1), 27-56.

Santiago, Paul. (2002) *Teacher Demand and Supply: Improving Teaching Quality and Addressing Teacher Shortages*. OECD Education Working Paper No 1. Paris: OECD.

UNESCO. (2006) *Teachers and Educational Quality: Monitoring Global Needs for 2015*. Montreal: UNESCO Institute for Statistics. Retrieved 2 January 2007 from www.unesco.org

UNESCO. (2006) Teacher Shortage in Cambodia. *Newsletter on Education*. Retrieved 2 January 2007 from <http://portal.unesco.org/education>

UNESCO/OECD. (2001). *Teachers for Tomorrow's Schools. Analysis of the World Education Indicators*. UNESCO/OECD World Indicators Program. Montreal: UNESCO Institute for Statistics. Retrieved 10 January 2007 from www.unesco.org

West, A. (2006). *Lifestyles of the Rich and Tasteful*. North Melbourne: Pluto Press.

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