10. PROFILES OF BEGINNING TEACHERS' PROFESSIONAL ENGAGEMENT AND CAREER DEVELOPMENT ASPIRATIONS

INTRODUCTION

Teacher educators, policy makers, and employing authorities have for too long overlooked the values, beliefs and motivations of those entering teacher education programs and insufficiently explored how these shape beginning teachers' aspirations for professional engagement and the trajectory of their career development.

> Unless teacher educators engage prospective students in a critical examination of their entering beliefs in light of compelling alternatives and help them develop powerful images of good teaching and strong professional commitments, these entering beliefs will continue to shape their ideas and practices. (Feiman-Nemser, 2001, p. 1017)

Continuing insistence on the need to reform teacher education derives from long-standing debates about the quality of the teaching workforce and scrutiny of the different programs through which teachers are professionally prepared. Concurrently, there is an equally persistent problem of teacher shortages – in Australia as in many other countries. Within our perspective, beginning teachers' perceptions impact their subsequent professional engagement, development, and quality of their work. Our 'FIT-Choice' [Factors Influencing Teaching Choice] theoretical model outlines these relationships over time (see Richardson & Watt, 2006). It is grounded in Expectancy-Value theory (Eccles (Parsons) et al., 1983; Wigfield & Eccles, 2000), which argues that individuals' choices and behaviours are shaped by their expectancies and their values, and we have elsewhere detailed the development and validation of our framework for the context of teaching as a career choice (Richardson & Watt, 2006; Watt & Richardson, in review).

In this chapter, we adopt a multidimensional approach to investigate participants' professional engagement and career development aspirations as they conclude their teaching degree. We focus on teacher graduands to tap aspects of professional identification at this critical final stage of initial teacher education. Specific facets we explore encompass planned effort, planned persistence, professional development aspirations, and leadership aspirations for when they enter the profession. Additional evaluation of satisfaction with the choice of a teaching career was included at both entry to and exit from teacher education,

A. Berry, A. Clemans and A. Kostogriz (Eds.), Dimensions of Professional Learning: Professionalism, Practice and Identity, 155–175.

permitting us to explore *changes* in satisfaction, and how these relate to professional engagement and career development aspirations encompassing cognitive, emotional, and behavioural aspects, being the different dimensions of engagement that prior research has emphasised (see Guthrie & Wigfield, 2000). All factors were averaged composites of survey scale items in Table 10.1[1], and demonstrated good reliability and construct validity.

Our investigation is based on longitudinal data from a large sample of 510 beginning teachers. Common sense suggests beginning teachers may differ from one another, and we explore whether there are different '*types*' having shared profiles of aspirations for professional engagement and career development. We adopt cluster analysis, a mixed-methods and person-centred approach with which to identify differing subgroups. Within identified profiles we frame our analysis of the qualitative data, and develop group-based explanations concerning the predictors and correlates for each beginning teacher 'type'.

Participants completed a graduate-entry primary or secondary teacher education degree at one of three Australian universities (119 University of Sydney, 214 Monash University, 177 University of Western Sydney), and all held a relevant prior undergraduate qualification. Participants provided data at two timepoints: on their entry to teacher education, and immediately prior to completion of their qualification. We draw on closed-ended quantitative and open-ended qualitative data from surveys administered during regular classes at both occasions. In our ongoing longitudinal study we will subsequently follow these and other beginning teachers through their early professional experiences, to better understand how, in the cauldron of professional practice in schools across a range of sociocultural contexts, initial motivations are confirmed or disconfirmed, and how these experiences begin to shape different professional identities – particularly those who are committed to and effective in the teaching profession.

Historically teachers have not received high returns in terms of salary or status and have been expected to look upon teaching more as a vocation than as strictly a job. Over recent decades there have been significant changes to the labour market which potentially impact on how those who undertake teacher education programs look upon teaching as a career choice. It is reasonable to expect these individuals will have different career trajectories in mind even at the outset, with some only intending to teach for a short period. The specific questions that our chapter addresses are:

- Can we identify different subgroups having distinct *profiles* of professional engagement and career development aspirations, and are we able to develop explanations to predict who is likely to fall into these different clusters?
- Do levels of satisfaction with the choice of teaching as a career *change* through teacher education, and are changes different for each cluster?
- What might this imply for teacher education programs, policy makers, and employing authorities?

Table 10.1. Factor items, reliabilities and pattern coefficients

Factor	*Item*	*Stem [1 (not at all) to 7 (extremely)]*	*Pattern coefficient*
Satisfaction with choice (α = .925)	a12	How happy are you with your decision to become a teacher?	.70
	a9	How satisfied are you with your decision to become a teacher?	.68
Professional Engagement			
Planned effort (α = .915)	a11	How much effort will you put into your teaching?	.85
	a8	How much will you work at being a good teacher?	.81
	a14	How much effort do you plan to exert as a teacher?	.80
	a5	How hard will you strive to be an effective teacher?	.72
Planned persistence (α = .962)	a16	How sure are you that you will stay in the teaching profession?	.90
	a7	How certain are you that you will remain in teaching?	.86
	a10	How confident are you that you will stick with teaching?	.86
	a13	How sure are you that you will persist in a teaching career?	.80
Career Development Aspirations: "To what extent do you aim to..."			
Professional development aspirations (α = .914)	b7	participate in professional development courses?	.85
	b3	undertake further professional development?	.84
	b9	learn about current educational developments?	.67
	b5	continue to acquire curriculum knowledge?	.59
	b1	continue learning how to improve your teaching skills?	.53
Leadership aspirations (α = .913)	b4	reach a position of management in schools?	.85
	b8	take up a leadership role in schools?	.84
	b6	seek a staff supervision role in schools?	.80
	b2	have leadership responsibilities in schools?	.67

THREE 'TYPES' OF BEGINNING TEACHERS

Cluster Profiles

We identified three subgroups of beginning teachers in terms of their planned effort, planned persistence, professional development aspirations, and leadership aspirations. These clusters were supported in our hierarchical cluster analysis using Ward's method based on the cluster dendogram, the number of 'steps' in the scree-

type plot of fusion coefficients relative to number of clusters and on the basis of substantive interpretability. The three different profiles are illustrated in Figure 10.1.[2] Cluster 1 contained 225 participants[3], and gave the highest ratings for all four factors. We named this group the 'highly engaged persisters'. Cluster 2 contained 132 participants, whose responses were similar to Cluster 1 except on *persistence*, where Cluster 2 responses were significantly lower. We named this group the 'highly engaged switchers'. Cluster 3 contained 136 participants, and exhibited significantly lower scores on our four measures of professional engagement. Although their mean scores on planned effort and professional development aspirations were still quite high relative to the 7-point scale, they were lower than for the other two clusters. In particular, their mean scores for planned persistence and leadership aspirations were relatively low *both* on the 7-point scale and compared with the other clusters. We consequently named this group the 'lower engaged desisters'.

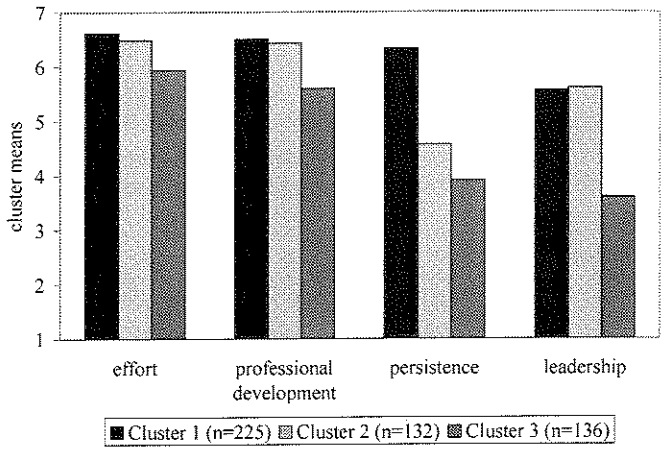

Figure 10.1. Mean professional engagement and career development aspiration scores for 'highly engaged persisters' (Cluster 1), 'highly engaged switchers' (Cluster 2), and 'lower engaged desisters' (Cluster 3)[4]

Different Professional Plans for Different Beginning Teacher 'Types'

How does our identification of these 'types' help our understanding about beginning teachers' development and needs? We next examined correlates and consequences of belonging to each cluster. First, participants' professional plans were explored through a question on the survey which asked them to select one of "I do not want a teaching career"; "I want to teach in the short-term but later want to pursue a different profession"; or "I want my whole career to be in the teaching profession". Those who did not want a teaching career wrote about why, and nominated their desired career. Those who wanted to teach in the short-term but

then wanted to pursue a different profession wrote about why, what career they subsequently planned to pursue, and how many years until they planned pursuing it. Those who wanted their whole career to be in the teaching profession indicated why this was the case.

The overwhelming majority of Cluster 1 (87.3%) planned to teach for their whole career, in contrast to lower proportions for Cluster 2 (53.5%), with Cluster 3 the lowest (40.9%; Figure 10.2). The pattern was reversed for proportions of participants within each cluster who planned to teach in the short-term and then switch to another career: Cluster 3 had the highest proportion (52.3%), followed by Cluster 2 (45.7), and Cluster 1 (12.2%). Only small numbers of participants planned not to teach at all across the whole sample (2.8%): Cluster 3 had the highest proportion (6.8%), followed by negligible proportions within Clusters 2 (0.8%, one person) and 1 (0.5%, one person). All cluster differences in professional plans were statistically significant. To explore the reasons *why* individuals from each cluster held such different plans, we turned to participants' open-ended qualitative responses.

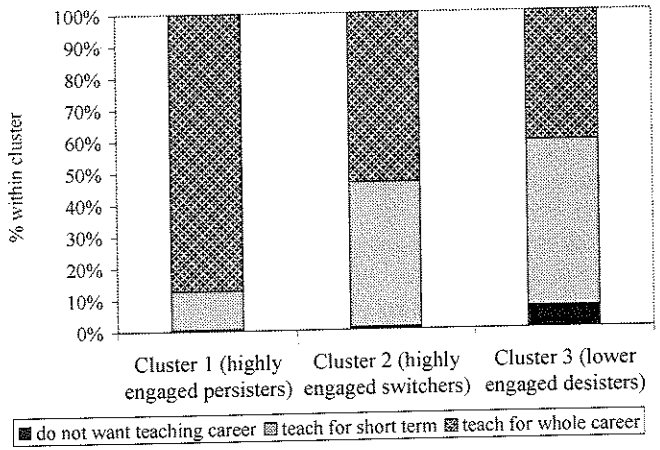

Figure 10.2. Professional plans for cluster groups

Reasons for Cluster Differences in Professional Plans

Cluster membership framed our analysis and reporting of participants' open-ended qualitative responses in relation to their professional plans – an approach we have found informative with previous samples of beginning teachers (see Richardson & Watt, 2005). Themes from participants' unrestricted open-ended reasons regarding their professional plans were developed within each cluster, to illustrate and elucidate within-cluster patterns and between-cluster differences.

Cluster 1 - Highly Engaged Persisters

As indicated earlier, the overwhelming majority of people in Cluster 1 intended to spend their whole career in teaching. This was true for participants who were in the younger age groups and for whom teaching was their first career through to those who were older and making a career change, some of whom had had more than one prior career. Open-ended comments foregrounded salient reasons for career choice. The most frequently nominated reason for wanting to teach was a passion for teaching which was for them satisfying, varied, and interesting. A related theme saw teaching as a 'dream ambition', a vocation or calling, and something they were 'supposed to do'. Their enthusiasm for the intrinsic rewards of teaching is captured in a sample of their comments:

Intrinsic satisfaction.

I love teaching students.

Because it is interesting and has varied tasks.

It's my calling.

I am passionate about teaching and know I can be beneficial to students.

This finding was also reflected in another study (Watt & Richardson, in review) where we have used additional quantitative data from this sample, and found that individuals high on intrinsic and altruistic motivations for initially choosing teaching were also those who, on completion of the program, planned to persist the longest.

A desire to work with children and adolescents to influence their learning and to make a difference in their lives was reassuringly central to the reasons people gave for wanting their whole career in teaching:

I enjoy teaching and I love working with kids to further their learning.

Because I enjoy working with children and find it rewarding

Love kids and like to learn 'how' they learn – general interest.

Because I want to make a difference in the lives of kids.

Because I like to share my knowledge with others and make a difference.

Clearly, people who do not want a career that involves working with children or adolescents would be ill-advised to choose teaching as their occupation. Working with young people to foster their learning of particular disciplines, and to exert a positive influence on their personal and social development, is something that these people believe a career in teaching provides. Cluster 1 also included people who had chosen teaching because it offered them a satisfying career and supported their family life including caring for their own children. Teaching allowed them the means by which to meet their career goals without sacrificing a quality family life:

It is a career that is satisfying, fulfilling and suits family situation.

Fits in with family as well as career goals.

Family reasons and my relationship with children.

In a previous study of an independent sample of people who switched careers into teaching (Richardson & Watt, 2005) we identified people who had given up highly paid, yet demanding, inflexible, and time-hungry careers in business and accounting for the opportunity to combine career with a lifestyle change focused on securing more time for family and the care of children. An emphasis on lifestyle change was again evident with some people in this sample who were seeking a combination of 'lifestyle and personal satisfaction', or a better balance of work with other aspects of their life. As one participant observed: "I've worked for *corporates* for a long time and now I want a lifestyle improvement". Others who were making a career change similarly expressed their hope that teaching would meet their expectations and they would not need to move on to yet another career path:

I have tried other careers and hope to settle.

I've made a major change late in life and intend to stick it out.

Moreover, there were those who were sure that on making a career switch in favour of teaching they had finally found an occupation that fitted more comfortably with their goals and ambitions than the previous careers they had pursued:

This is my fourth career choice and this is what I really want to do.

I have come to it as a second career and now know it's what I want to do.

I have worked a few years in industry and believe teaching is where I really belong.

I have already had a design career and wish to have a stable and rewarding career in teaching.

While the career switchers had tried other careers and arrived at teaching by a more circuitous route, others looked equally approvingly on the possibilities of a long career in the profession. Their comments focused on teaching as being enjoyable, allowing one to make a contribution to the lives of others, while also being personally rewarding and a morally good career:

It's a positive thing to do with my life.

I consider it a rewarding career.

Most real/rewarding profession available to me.

We contribute to something worthwhile.

Members of Cluster 1 may have been enthusiastic about their career choice but they were also very aware that the financial rewards are not very great; as one participant said: "It is a stable career and reward is OK". As we have seen above,

others emphasised the personal and moral dimensions of the reward structure provided by the career; however it remains to be determined if less tangible rewards will be sufficient to compensate for the comparatively modest financial returns that a career in teaching provides.

Cluster 2 – Highly engaged switchers

We have characterised members of Cluster 2 as 'switchers'. That is, they were more likely to indicate they had career plans other than spending their whole career in teaching. Interestingly, people in Cluster 2 were already contemplating another career path as they completed their teacher education program, which they may have been contemplating prior to their entry. Many of them were able to nominate their reason for not wanting to stay in teaching, as well as when they planned to leave the career for something else. Timeframes ranged from 'now' through 15 years. This cluster drew together people who knew they needed new challenges over the course of their career and therefore sought to be involved in a diversity of occupations including business, other public services, health promotion, entertainment, the arts and crafts, design, and their own small businesses. They are perhaps best described as *restless spirits* – needing new challenges and a diversity of experiences including other career options such as working in policing, ASIO and foreign affairs, and overseas travel. Their restlessness and desire for variety and diversity is captured in these comments:

I like diversity and want to grow as a person always.

I will outgrow it and like new challenges.

I want to experience more than one career.

I feel that there are more things I want to try.

A further theme was the identification of a 'five year plan' for their career development – a plan that would see them teach for about five years, by which time they hoped to have positioned themselves to exit. These people looked upon teaching as a 'back-up plan' with which to build their personal and financial resources in preparation for another career. The comment "I'm on a five year plan" was indicative of the sentiments of many in this cluster. In the comments that follow, participants were more specific about what plans they had for the future and why teaching was for them a back-up career. It is not surprising that people who in the longer term were seeking careers in the entertainment industry and as visual artists (painters, photographers and designers) were also looking to secure a reliable income stream while attempting to establish themselves. Even though teaching offers a modest income, it nonetheless provided a degree of security that the performing and visual arts do not necessarily provide. While the longer-term careers of these people were elsewhere (nominated careers in parentheses), they nonetheless planned to pursue teaching in the short-term:

Teaching is my back up plan (Entertainment).

I enjoy teaching, and cannot as yet survive as an artist (Prefer art).

Never saw teaching as the only thing I wanted to do (Art related/self-employed).

Stability, build foundations (Photographer).

Money and broaden my life experience (Art/Design small business).

Want my own business (Interior Decorating).

For others, simply keeping their options open was more important than foreclosing on teaching as a career for life. For this group, teaching would afford them the skills and experiences that may be applied in other domains and contexts outside of school classrooms, and as such would function as a stepping stone into other professions. Thus individuals indicated their intentions of finding employment as a 'trainer in a software industry', being involved in nutrition and health promotion, working in corporate training, entering politics, being an academic, or just being open to 'a broad life perspective'. While some individuals in this cluster indicated a desire to continue working with children and adolescents, this would not be in classroom contexts. They were looking forward to becoming counselling psychologists, and in one case, entering into religious ministry with children. A desire to keep their options open was interpreted differently by some who, at the end of their teacher education program, were unsure about the viability of a career in teaching. They clearly did not identify with the prospects of teaching as a long-term career and remained undecided about how long they would persist. They would wait to see how things worked out. They were not enthusiastic about the profession and would weigh up confirming or disconfirming experiences. These people were less interested in teaching as a vocation and more focused on realising job satisfaction. The following comments revealed their hesitation and commitment only to the short-term:

Not sure and don't know if I really want to [teach].

It all depends on the experience I will have in first couple of years.

I am not going to stay in teaching if I do not like it?

Unsure as to how I'll enjoy teaching in a few years.

Not sure if it's for me.

It's worth doing this rather than doing nothing.

A substantial number of this group did not undertake a teacher education program intending to remain in teaching for their whole career. On the contrary, their intention had always been to operate on a 'five year plan' and not to persist in teaching. While they planned to be as effortful, engaged, and to do as good a job as those who wanted their whole career in teaching (Cluster 1), they also planned to then move on to another career.

Cluster 3 – Lower engaged desisters

Cluster 3 members contrasted with both Clusters 1 and 2. We have identified this cluster as the 'desisters' from teaching. They were the least likely to plan to persist, and if they took up teaching at all, offered many reasons why they were not planning on a long career in the profession. The sources of their disaffection were varied and stemmed in a minority of cases from unpleasant experiences at university and "bad practicum experiences". Others reported that teaching proved to be too demanding – it was "too much work", demanded "too much work preparation", and schools provided "too little administrative support". As a result, members of this cluster felt they would "not have enough energy when older", that they would become "jaded", and quickly suffer from career burnout. Comments such as "children don't value education" and "it does not suit my needs – the preparation and class management issues", and "don't want to work in a high school – will teach overseas to get money", point to experiences during the course of their teacher education program that took on a negative valence in relation to their tenure in teaching.

While the first themed set of comments from this cluster was concerned with the demands of the career, a second theme focused on the paucity of career prospects and rewards. A number of the people in this second set made the observation that they would receive more "pay and respect", and better "career progression" by working in other fields such as IT, business management, and consulting. The comments that it "takes too long to get a full time job!" and "teaching is not very stable" seem to point to the frustrations recent graduates often experience in shuffling between a wide range of schools eking out a sometimes very insecure living by undertaking substitute and relief teaching work before they can secure full-time employment. Given that members of this cluster generally had higher qualifications and a range of previous occupations, they may easily be attracted into other careers where their teaching qualification would be viewed as a marketable asset, especially in corporate environments where training is a feature of the workplace.

For some in this cluster teaching was not their 'first option'. Careers as research scientists and in the academy, together with further education and eventual careers in psychology and sports psychology, were more attractive options. Having other options as a journalist, in human resource management, or as an engineer perhaps made it possible for members of this cluster to evaluate their decision to undertake a one-to-two-year teacher education program differently. As with Cluster 2, this cluster contained a group of people who looked upon teaching as a 'stepping stone' into other careers such as working in art galleries, being a theatre director/actor, working in conservation, educational tourism, as well as those who wanted to combine part-time teaching with tourism, environmental consulting, the fine arts, and photography.

People in Cluster 3 did not necessarily want to teach at all and even though they may have enjoyed "children and teaching", they observed that they needed change and variety in their life and as a consequence did not "want to be stuck" in a career

that from their perspective lacked "flexibility". As one participant wrote, "I can't see myself doing anything for 40 yrs!! I'll get bored!" while another contended that "Nothing is forever". These sentiments paralleled those of others who preferred "not to map out future", were "still uncertain whether to take up teaching – I don't have a plan", and those who were generally "not sure what to do – want to look after child".

The finding that a significant number of people in Clusters 2 and 3 only wanted to teach in the short term and that their longer term career plans were not going to be in teaching, begs the question as to where these people were intending to go with their career plans? While people in Cluster 2 identified non-education related careers in business, IT consulting, management, the arts, and health-related occupations; members of Cluster 3 were more intent on these careers than those from Cluster 2. Of the 77 people from Clusters 2 and 3 who were able to identify their longer term career plan, 34 saw themselves moving into careers that were broadly related to education or training. Taken together these people were seeking longer term careers in curriculum design and development, religious ministry to children and adolescents, youth counsellors and educational psychologists, research and academic careers, trainers in business organisational contexts, and as education officers at public art galleries, nutritional and health promotion officers, educational development officers in the police force, and music therapists. While they intended leaving teaching, they nonetheless hoped to move into education-related careers where the emphasis is on broader public educational activities than work in classrooms and schools.

CHANGING SATISFACTION LEVELS THROUGH TEACHER EDUCATION: A MECHANISM TO HELP EXPLAIN BEGINNING TEACHER PROFILES?

Cluster Differences in the Satisfaction with Teaching as a Career Choice

Is it because Cluster 1 is the most satisfied with their choice of teaching as a career that they more often plan to pursue their whole career in the teaching profession? Is it because Cluster 3 is the least satisfied that they are substantially less likely to plan this? Our data suggest this could be the case. Cluster 1 were significantly the most satisfied with their choice at the time of their degree completion, followed by Cluster 2, with Cluster 3 significantly the least satisfied ($F(2, 477) = 110.26$). Because we had collected satisfaction data both at the start and finish of participants' teaching qualifications, we were also able to investigate whether satisfaction levels remained *stable* through the course of their teacher education preparation, or whether the different clusters exhibited different *change* trajectories.

Interestingly, Cluster 1 did start out and remain highest, and Cluster 3 lowest, from their entry to teacher education ($F(2, 483) = 105.06$). Moreover, there was a significant interaction effect between cluster and time ($F(2, 483) = 4.83$), where Cluster 1 *increased* in satisfaction ($F(1, 220) = 10.78$), Cluster 2 maintained *stable* satisfaction ($F(1, 130) = 0.07$), and Cluster 3 showed a trend to *decrease* in satisfaction ($F(1, 133) = 2.76$; Figure 10.3). This implies Cluster 1 may well have

become more 'turned on' to teaching while Cluster 3 were more 'turned off' through their teacher education experiences. Support for the idea that Cluster 2 had always planned switch to another profession is found in the stability of their satisfaction levels through teacher education. Because satisfaction changes were small where they occurred, we next examined the extent to which changes helped explain the three beginning teacher clusters.

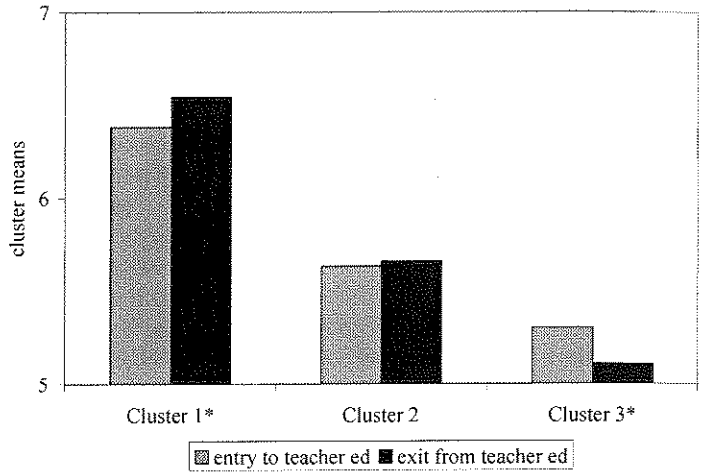

Figure 10.3. Change trajectories for satisfaction with the choice of teaching as a career for cluster groups (asterisks denote statistically significant changes within cluster)

Relationships between Entry and Exit Satisfaction Levels and Beginning Teacher Profiles

Could cluster-specific career choice satisfaction trajectories help explain the cluster profiles of professional engagement and career development aspirations for people completing their teaching degree? We expected individuals' levels of satisfaction would relate to their professional engagement and career development aspirations. Further, we anticipated that *changes* in satisfaction through teacher education would relate to these outcomes. Our two timepoint measurement of satisfaction with the choice of teaching enabled us to explore this question in several interesting ways.

Satisfaction with the choice of teaching as a career at the end of participants' teaching degree was moderately correlated with their concurrent planned effort, persistence, professional development, leadership aspirations, and professional plans. These relationships are presented in the first row of Table 10.2. Similar relationships were evident from participants' *initial* satisfaction levels at entry to teacher education, as presented in the second row of Table 10.2, although not surprisingly the strength of these relationships was weaker.

Table 10.2. Relationships between satisfaction with the choice of teaching as a career and change in satisfaction, with professional engagement and career development aspirations (Pearson Correlations with Listwise N = 473)

	effort	professional development	persistence	leadership	professional plans
satisfaction (on exit)	.528**	.493**	.686**	.348**	.460**
satisfaction (on entry)	.319**	.288**	.506**	.267**	.362**
satisfaction change (exit minus entry)	.226**	.222**	.196**	.088	.108†

** $p < .001$, * $p < .01$, † $p < .05$

These tests did not tap the more interesting question concerning whether the amount of *change* in satisfaction (from entry to teacher education through exit) related to the professional engagement and career development aspirations for these beginning teachers. We created an index of satisfaction change through subtracting entry satisfaction scores from exit scores, such that positive numbers indicated increased satisfaction, zero indicated no change, and negative numbers indicated decreased satisfaction. As can be seen from the third row of Table 10.2 – amount of satisfaction change did indeed relate statistically significantly to all the factors except leadership aspirations.

Because different changes in satisfaction relate to individuals' professional engagement and career development aspirations, we need to question *why* Cluster 3 became disaffected during their teacher education experiences, particularly since this group accounted for almost one-third (28%) of the cohort. From our large-scale ongoing longitudinal study, we actually know quite a lot about what factors shape teacher education entrants' satisfaction with their choice of teaching as a career (Richardson & Watt, 2006). Not too surprisingly, commencing teacher education candidates' satisfaction relates to their *motivations* for having chosen teaching as a career. The motivations which relate most strongly to high initial satisfaction levels include the altruistic-type motivations most frequently emphasised in the teacher education literature, as well as the intrinsic value individuals attach to teaching, and self-evaluations of their teaching-related skills (Watt & Richardson, in review).

We know less about what factors may alter teacher education candidates' career choice satisfaction during the course of their teacher preparation degree. Why would it be that some people's satisfaction levels increase, others remain the same, and others decrease? Is this something that we could predict from candidates' background characteristics, or is it intimately and idiosyncratically bound up with individuals' unique experiences during teacher education? At the individual level decisions about one's level of commitment may appear idiosyncratic but these patterns may be more readily discerned at the group level. The open-ended responses suggest that the experiences of those in Cluster 1 during the course of

their teacher education program (including the practicum in schools) had dovetailed with their expectations, values and beliefs and that there was a matching of the person with the workplace environment. Such a fit resulted in increasing levels of satisfaction with their career choice, fostering expectations of planned effort, planned professional development, persistence, and a desire for leadership roles. Cluster 2 did not plan to stay in teaching for the long haul and although they would exert equally high levels of effort, professional development, and leadership to Cluster 1, they did not plan on their whole career being in teaching. Members of Cluster 3 were overwhelmingly less comfortable with the fit between themselves and teaching as a career path. They would not be around long enough to take an interest in leadership roles. Although this group had willingly signed up for further education in the hope of becoming a teacher, their experiences during teacher education, including the practicum experiences in schools, had in fact not confirmed their expectations, beliefs, and values.

CAN WE PREDICT WHO WILL BELONG TO WHICH CLUSTER?

Do Demographic Characteristics Make a Difference?

Are there any background indicators that would give us a clue as to which people are more likely to be 'highly engaged persisters', 'highly engaged switchers', or 'lower engaged desisters'? Gender was not a relevant factor in cluster composition, while language spoken at home was (English vs. other; $\chi^2(2) = 10.88$), with a greater proportion of Cluster 1 coming from non-English speaking backgrounds [NESB], compared with the other clusters (Table 10.3). Whether people had children also differed across clusters ($\chi^2(2) = 15.622$), with almost one-third of Clusters 1 and 3 having children, compared with 13% in Cluster 2 (Table 10.3). Undertaking primary versus secondary level teacher education had no relationship with cluster membership.

Table 10.3. Cluster composition by gender, home language, primary/secondary level, children, consideration and pursuit of other jobs, and prior qualifications

	Cluster 1 ($n = 225$) *n* (%)	*Cluster 2* ($n = 132$) *n* (%)	*Cluster 3* ($n = 136$) *n* (%)	*Totals*
male	65 (28.9%)	39 (29.5%)	33 (24.3%)	137
female	160 (71.1%)	93 (70.5%)	103 (75.7%)	356
English home language	177 (79.0%)	121 (91.7%)	118 (86.8%)	416
other home language	47 (21.0%)	11 (8.3%)	18 (13.2%)	76
primary	70 (31.1%)	41 (31.1%)	32 (23.5%)	143
secondary	155 (68.9%)	91 (68.9%)	104 (76.5%)	350

no children	156 (69.3%)	115 (87.1%)	95 (69.9%)	366
children	69 (30.7%)	17 (12.9%)	41 (30.1%)	127
other job not considered	77 (34.2%)	42 (31.8%)	31 (22.8%)	150
considered other job	61 (27.1%)	41 (31.1%)	47 (34.6%)	149
pursued other job	87 (38.7%)	49 (37.1%)	58 (42.6%)	194
undergraduate degree	160 (72.7%)	95 (73.1%)	85 (63.0%)	340
undergraduate Honours	37 (16.8%)	21 (16.2%)	27 (20.0%)	85
postgraduate degree	23 (10.5%)	14 (10.7%)	23 (17.0%)	60

Cluster 2 tended to be the youngest, while Clusters 1 and 3 were older ($F(2, 482) = 6.40$; Figure 10.4). Individuals' ages in Cluster 2 were also more tightly clustered together.

Cluster 2 came from higher parental income backgrounds than Cluster 1 ($F(2, 415) = 3.82$), while Cluster 3 fell in between. Figure 10.5 shows the distributions for combined parent income within each cluster. Participants were generally not from affluent family backgrounds and the modal combined parent income category was \$60 001 to \$90 000.

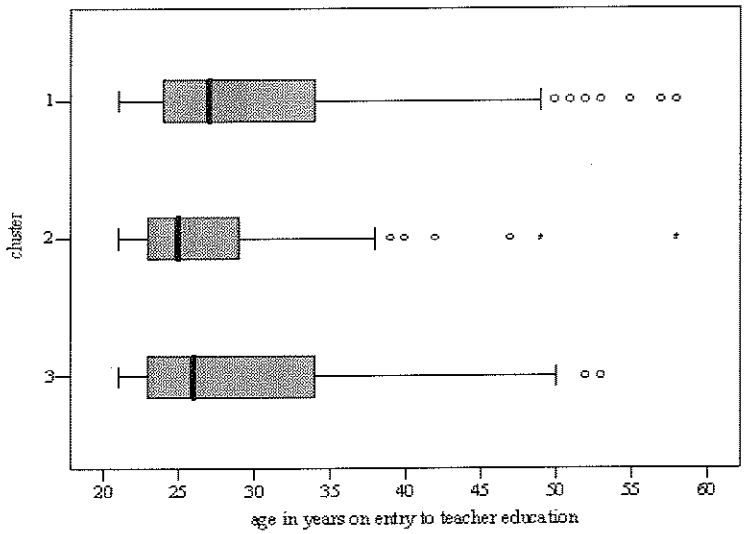

Figure 10.4. Cluster profiles for age of beginning teacher education[5]

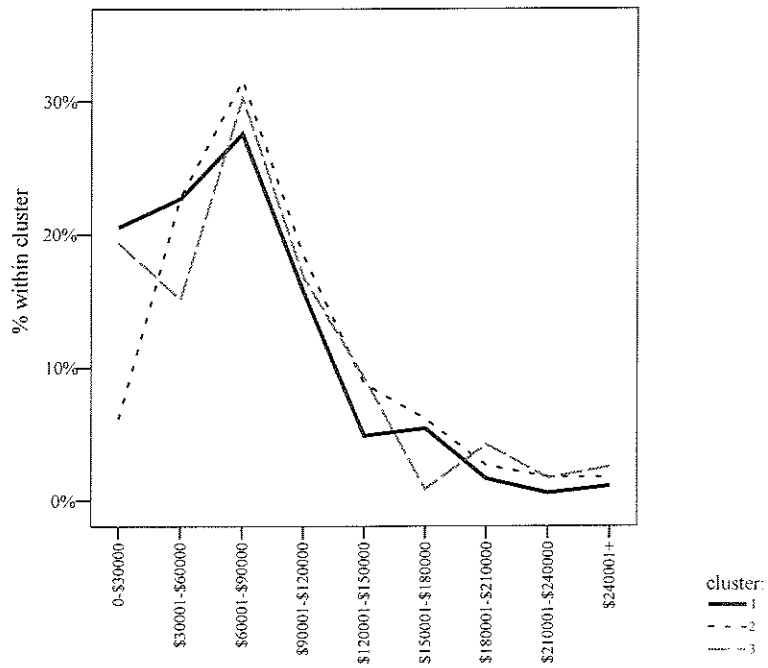

Figure 10.5. Cluster profiles for combined parent income (indicative SES background) Career History, Prior Education, and Career Decision

Although the clusters did not significantly differ in terms of whether individuals had considered or pursued a different career prior to enrolling in teacher education (Table 10.3), or in their levels of satisfaction with previously *pursued* jobs; there were interesting differences in relation to the *types* of careers individuals from each cluster had pursued. We coded the occupational status of the jobs using O*NET – a comprehensive database of occupational information provided by the United States Department of Labor (US Department of Labor Employment and Training Administration, 1998), which ranks each occupation in the database from 1 through 5, based on factors including average salary and amount of educational preparation and training required (for details see Richardson & Watt, 2006). Of the 188 individuals who reported another career prior to enrolling in teacher education (Cluster 1: n = 85, Cluster 2: n = 46, Cluster 3: n = 57), Cluster 3 tended to have had careers higher in occupational status, Cluster 2 lower, and Cluster 1 in between ($F(2, 185) = 2.98$; Figure 10.6). There was also a trend for Cluster 3 to be more highly qualified than Cluster 1 ($F(2, 482) = 2.67$, see Table 10.3). For the 149 people who had previously seriously *considered* other jobs, there were no significant cluster differences in their occupational statuses (Figure 10.6).

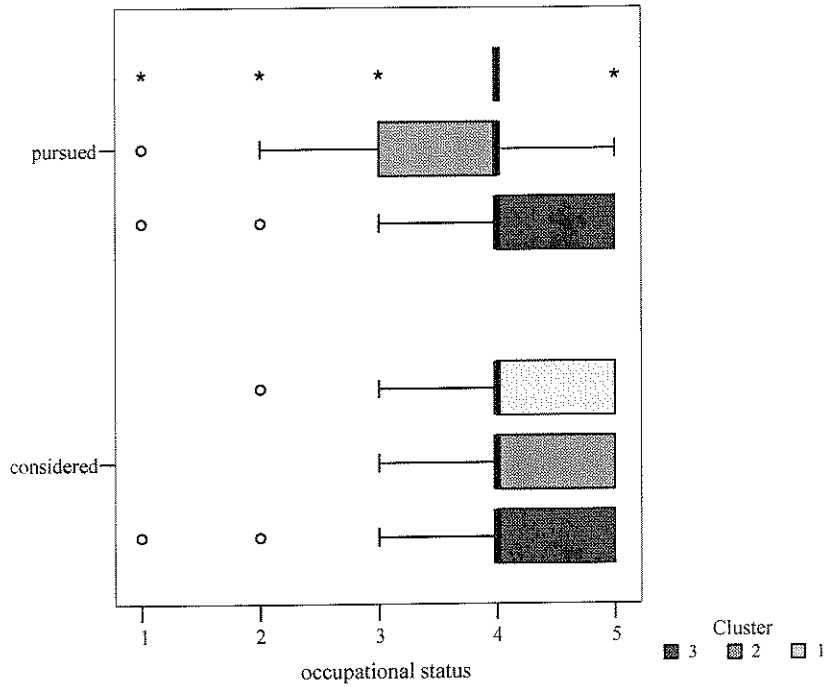

Figure 10.6. Cluster profiles of occupational statuses for previously pursued or considered careers[6]

The *timing* of when each cluster had chosen teaching as a career also differed significantly ($F(2, 472) = 6.84$), accounted for by Cluster 1 having decided to become teachers significantly earlier than Cluster 3, while Cluster 2 fell in between. On average, Cluster 1 had decided to teach 2.83 years ago ($SD = 1.76$), Cluster 2 had made this decision 2.50 years ago ($SD = 1.78$), and Cluster 3 had chosen to teach the most recently, 2.11 years ago ($SD = 1.73$). Taken together, distinguishing characteristics for each cluster paint the following summary pictures:

Highly Engaged Persisters (Cluster 1)

Highly engaged persisters were more likely to have children, tended to be older, to contain the greatest NESB concentration, to be from lower family income backgrounds, and to hold the lowest levels of prior qualifications. They had also chosen a teaching career the earliest, and for those who had previously seriously considered another career they expressed the lowest levels of satisfaction with career choices other than teaching. This cluster would likely be those preferred by teacher educators and school employers as holding the most desirable professional goals. These beginning teachers planned to exert high effort in their teaching, to

undertake professional development to continue to improve their professional practice, to persist in the profession for a long time, and to aspire to positions of school leadership. Almost half the sample (45.6%) was described by this profile.

Highly Engaged Switchers (Cluster 2)

Highly engaged switchers were the least likely to have children, tended to have the lowest NESB concentration, to come from higher family income backgrounds, and to be younger. Their previously pursued careers were of lower occupational status, although this may relate to their relative youth. This cluster appeared very similar to Cluster 1 – except that they did not plan to persist for as long in the profession. We need to question whether this is necessarily a bad thing. Although there is a problem of teacher shortages at this point in time in Australia and elsewhere, for the time these commencing teachers plan to remain in the profession they aim to exert high effort, undertake professional development, and aspire to school leadership positions to the same extent as Cluster 1. In the modern world of career consumerism, where few professions expect to attract employees for the entirety of their working lives, it may be unrealistic to expect that teaching will be quarantined from the effects of labour market forces. Adequate succession planning and staff management will depend on teacher education providers and employing authorities acknowledging this beginning teacher 'type' – a profile representing more than a quarter (26.8%) of our sample.

Lower Engaged Desisters (Cluster 3)

Lower engaged desisters contained a low (although not so low as Cluster 2) NESB concentration. They tended to be more likely to have children, to be older, to hold the highest levels of prior qualifications, and to have chosen a teaching career the most recently. Their previously pursued careers were the highest in occupational status, and they expressed the highest levels of satisfaction with careers other than teaching that they had seriously considered. This cluster exhibited a less desirable profile, shared by more than a quarter (27.6%) of the sample. They planned to exert lower effort, to engage less in professional development, to persist less long in the profession, and hold lower leadership aspirations, than either of the other two clusters. Although their effort and professional development plans were lower, they were still relatively high in absolute terms. However, their persistence and leadership plans were low both in relative and absolute terms.

IMPLICATIONS AND CHALLENGES FOR TEACHER EDUCATION

We recognise that our study was conducted with a graduate sample where the teaching qualification may take just one or two years, and that as a consequence there is a lower level of commitment required to complete the program. Would we find the same profiles across an undergraduate sample? Perhaps not, since the people who are members of Cluster 3 may well have discontinued a longer

program leaving a higher proportion of people committed to a career in teaching.

Our findings invite re-examination of recruitment efforts, aspects of teacher education programs, and current models of career induction and mentoring. We have demonstrated there are distinct 'types' of beginning teachers showing considerable variation in their predicted persistence in the profession. Whether participants had pursued a previous career and then come into teacher education had no impact on their cluster membership. Cluster 1 clearly exhibited the profile of people who are highly committed to a career in teaching, who will exert high levels of effort and commitment, and who see themselves having the potential for educational leadership. These people are highly positive about their choice of a teaching career, and exhibit the profile of aspirations for professional engagement and career development that the majority of teacher education programs would hope for in their graduates.

Cluster 3 by contrast, which is by no means a small or marginal group, have a profile that would not be anticipated as a desirable outcome of most teacher education programs. While most programs would acknowledge there will always be a small number of people who do not seek employment in teaching at the end of their program because they have realised that teaching is not a career for them, the robust size of this cluster is challenging. Cluster 3 included people who do not want to teach at all, others who are lower on engagement, effort, and leadership aspirations, and those who plan on leaving the profession as soon as possible. It is indeed surprising that Cluster 3 represents such a substantial proportion of the total sample. We have found that this group decreased in their satisfaction with their choice of teaching as a career through their teacher education, for reasons including confronting practicum experiences in schools, realising the demanding nature of teachers' work, and lack of school structural support. Attention to these factors and further exploration of other reasons for declining satisfaction levels may help educators devise ways to redress the pattern for this group. Fruitful emphases for teacher educators may include sustained supportive interactions through practicum periods, explicit investigation of teachers' multidimensional role in- and outside the classroom and in broader community contexts. At the same time, employing authorities and policy-makers need to attend to conditions in schools, including early mentoring of beginning teachers, school-university partnerships, and levels of structural and administrative support in schools which may overburden teachers with unnecessary work.

On the other hand, members of Cluster 2 plan to be effortful and highly engaged and to seek leadership roles during the period they are teaching, but have another plan and a desire for new challenges which will take them away from teaching. Although they are embarking on their teaching career explicitly intending not to persist, their high levels of engagement imply they will make a valuable contribution to the profession during the time they are in it. It is important that employing authorities and policy-makers be aware of this sizeable group in succession planning during the present teacher shortage. If, on the other hand, this group's career aspirations can be realised in the context of a teaching career, it may be possible to sustain them for a longer period. If within their five-year plan they

can achieve leadership roles and have their desire for new challenges and opportunities, as well as their engagement and effort appropriately rewarded, then it is likely that their time in teaching might be extended.

Teacher education and teacher employing authorities need to take seriously the different planned career trajectories of people who come into those programs. Educators and employers must go beyond the assumption that a person coming into teacher education and into a career in teaching may well not hold with a traditional lifetime career model of job security founded on incremental age-related advancement and loyalty to the profession. Whether teacher education and employing authorities acknowledge it or not, teaching as a career has been influenced by the changing nature of work and shifts in assumptions about the nature of career structures, loyalty, and the psychological meaning of work. Employees have learnt a new work order characterised by performance, flexibility, and multiple changes of employers, with career advancement based on individual learning-related, portable skills (Miles & Snow, 1996). Professionals with a range of skills and work experiences across different domains now take responsibility for their own careers which they seek to develop across organisations where they have been employed. From the perspective of employees, and in such fluid work contexts, personal identification with meaningful work becomes a litmus test of persistence. For beginning teachers, their different profiles of goals, commitments, plans, and aspirations will inevitably lead to different pathways of professional identity and development.

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NOTES

[1] The exploratory factor analysis using image extraction and oblimin rotation (delta = 0) converged in 12 iterations, with 70.553% cumulative extraction sums of squared loadings. There were no cross-loading pattern coefficients.

[2] There was a significant main effect of cluster membership on each of the four factors ($F(2, 490) = 45.090$ for effort, $F(2, 490) = 71.803$ for professional development, $F(2, 490) = 399.963$ for persistence, $F(2, 490) = 217.139$ for leadership), and differences between cluster pairs were identified using Tukey post hoc tests.

[3] Note that totals add to 493 rather than to 510 because 17 people did not have full data across the four factors from which cluster groups were formed.

[4] 'effort': planned effort; 'professional development': professional development aspirations; 'persistence': planned persistence; 'leadership': leadership aspirations.

[5] The box length is the interquartile range and the solid bar represents the median value. "o" denotes outliers with values between 1.5 and 3 box lengths from the upper or lower edge of the box, "*" denotes extreme cases with values more than 3 box lengths from the upper or lower edge of the box.

[6] Ibid.

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