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*What Factors Influence the  
Decisions of University Students  
to Become High School  
Teachers?*

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# ***What Factors Influence the Decisions of University Students to Become High School Teachers?***

Anthony Stokes

## **Abstract**

There is considerable evidence of impending teacher shortages throughout Australia and indeed most nations. Research so far has generally concentrated on how to improve the satisfaction of the current teachers and reduce the resignation rate, especially of early career teachers. This paper looks at the factors that influence the decisions of university students in deciding to pursue or not to pursue a career as a teacher. This study analyses the survey responses of over 400 university students throughout NSW in regard to their attitudes to becoming high school teachers and provides some possible policy implications of the results.

## **About the Author**

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## **Introduction**

New South Wales (and other states in Australia) is facing a crisis in education. It has been estimated that 50 percent of the current teacher workforce in the State will leave the teaching profession in the next five years and that the numbers of new teachers entering the profession will fall well short of that number (Horsley & Stokes 2005; MCEETYA 2003). In addition, as early as 2000 the NSW Department of Education and Training (DET) reported to Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA 2001) that there were shortages of high school teachers in Technological and Applied Studies (which includes Computing), Mathematics, and Science. The NSW DET also reported that an oversupply existed for recent graduates in some subject areas, especially Creative and Performing Arts, Personal Development, Health, and Physical Education. The Catholic Education Commission and regional Catholic Education Offices reported shortages to MCEETYA in Science, Mathematics, Technological and Applied Studies, and Computing. According to McMullen (2002), Head of Secondary Curriculum, Sydney Catholic Education Office, apart from these subjects, principals are increasingly reporting difficulties finding quality teachers for English, the Humanities, and Languages. He also expressed concern about the future of Vocational Education and Training (VET) subjects as they were limited by ... “schools’ abilities to find teachers qualified according to the increasingly stringent guidelines, especially in courses that are technology based.” The National and State Skill Shortage Lists Australia – 2003 (DEWR 2003) reported a state-wide shortage in NSW of teachers in the following teaching areas:

- Manual Arts/Tech Studies;

- Maths;
- Physics/Chemistry; and
- General Science.

In most cases classes in these teaching areas, which are not taken by specialists in the field, would be taken by 'out-of-field' teachers. In a worse case scenario as reported in the Vinson Report on Public Education in NSW (2002, p. xii), students would be instructed to ... "go to the front lawn," and grouped with other students for minding rather than formally being taught.

While in general there are sufficient people with teaching qualifications in schools at this time, the issue of teachers having few or no qualifications in subject areas that they are teaching is quite important. There is considerable evidence that teachers' knowledge and ability are associated with student learning in the classroom. A 1992 study in the USA (Hanushek, Gomes-Neto, and Harbison, as cited in Monk 1994) used measures of teachers' subject matter knowledge and student learning gains, and found a positive relationship between how much teachers knew about the subject taught and their students' learning gains in that subject. In a 1994 analysis of student performance compared to the Science and Mathematics subject matter preparation of their teachers, Monk reported a positive relationship between student gains in performance and the number of courses their teachers had taken in the subject taught. Other research in the USA by Goldhaber and Brewer (1997) that analysed the quality of teachers' postsecondary degrees and students' Mathematics performance found a positive relationship between these variables, with higher levels of performance among students whose teachers held a bachelors or masters degree in Mathematics than among students whose teachers were out-of-field. In 2000, Goldhaber and Brewer examined data on the postsecondary degrees and certification status of teachers and their students' performance in Mathematics and Science. They observed a positive relationship between teachers' degrees and student performance in Mathematics consistent with earlier findings. They also found that students whose teachers were certified in Mathematics but did not hold a postsecondary degree in Mathematics did not perform as well as students whose teachers held a postsecondary degree in Mathematics.

The main source of new teachers into the high school teacher labour market in NSW is new university graduates. The problem facing education authorities is that from 1983 to 2004 the proportion of higher education students studying Education declined from 21.3 percent to 9.7 percent. Across Australia the actual number of Education students fell from 74,314 in 1983 to 73,680 in 2000. While the number of female students studying Education increased over the period by 13.8 percent, the number of male students declined by 28.8 percent (DEST 2005). There are a number of issues to be considered. First, are there different factors that influence the decisions of male and female university graduates to enter the teacher labour market? Second, what factors influence the decisions of students to pursue careers in teaching compared to other careers? Finally, what can be done to increase the overall level of university graduates entering teaching?

There is very limited research into these issues in Australia. Richardson and Watt (2005) used surveys and interviews to target students in a 1-year pre-service teacher education program at Monash University. They looked at reasons why people were going into teaching but did not consider why people were not going into teaching. The factors that they found most important were prior considerations, career fit, time for

family and financial reward. While there was not a significant difference in the gender responses on these issues, the sample size was small (63 females and 11 males). A larger study by Richardson and Watt (2006) of first year pre-service teachers at three universities in Sydney and Melbourne used FIT-Choice (“Factors Influencing Teacher Choice”) framework based on expectancy-value theory to investigate why people choose a teaching career. Their research showed that the main factors that motivated the students to become teachers were their perceived abilities to be teachers, the intrinsic value of teaching and the desire to make a social contribution, shape the future and work with children/adolescents.

This study will consider some of these factors but is distinctive as it also examines why people do not choose to teach. The aim of the study is to survey university students in NSW to determine their attitudes towards pursuing a career as a high school teacher and the importance of various factors in making their career choices. The differences in factors and the relative level of importance of those factors that influence students’ career choices are an important consideration for administrators of school systems and schools in attempting to attract new graduates into teaching.

### **Methodology of the Study**

Two surveys were conducted to investigate the factors that influence first and third/final year university students in pursuing careers especially in relation to high school teaching. The first year students were selected as they had recently made a decision to go to university and had selected their course of study. In some cases this decision would still make it possible for them to follow a teaching career, in other cases it would be much more difficult, such as for those who selected nursing courses. Surveys of the third/final year students were conducted, as this group was about to make their actual choices in entering the workforce. They were also surveyed to see if their attitudes to entering the teaching profession had changed while they were at university.

#### *(i) Participants and procedures*

Requests were made to all universities in NSW to participate in this study. The Deans of the faculties of Education, Arts, Sciences, and Commerce/Economics<sup>1</sup> were asked for permission to survey 30-40 first and third/final year students at random, and for permission to ask the students, if they would be willing to participate in the study. The number of students per faculty was selected to gain a diverse sample of views on the issues to be surveyed and to provide information that would be representative of the different students and the different geographical regions of NSW. Individual participation in the surveys, by the students, was voluntary and anonymous. Six universities agreed to participate in the study. These included city and regional universities in NSW. Altogether a sample of 201 first year students and 209 third/final year students were surveyed in this study. The time frame for completion of the surveys ranged from the second half of 2002 to the first half of 2003.

The university student surveys designed for this study classified students based on:

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<sup>1</sup> These four faculties were chosen, as they were the ones most likely to generate entrants and graduates who potentially would be most likely to become high school teachers.

- current year of university study;
- gender;
- age;
- University Admission Index and other forms of entry;
- area of academic qualifications of current course;
- place of residence;
- type of school attended; and
- their intention to become teachers.

The students were asked to rate, on a 1-5 scale, the importance of the following factors<sup>2</sup> in their choosing a career. Those factors were:

- level of salary;
- job security;
- a low level of stress;
- number of holidays;
- hours of work;
- the attitude and support of peers and friends;
- the attitude and support of the employer;
- attitude of the general public towards your career;
- the support of your family;
- interest in the work you do;
- job satisfaction;
- the possibility of promotion;
- desire to help others.

The students were also asked questions relating to:

- How certain factors influenced their decision to become a teacher?
- Whether higher teachers' salaries would increase their likelihood to become teachers and the required amount?

The final year students were also asked, if their attitude to becoming a teacher had changed while at university. If so, they were asked in what ways and what factors had caused a change in their attitude?

### *(ii) Data analysis*

The surveys included both quantitative and qualitative responses. For the quantitative data, the university students were asked to rate, on a 1-5 scale various factors in determining their decisions to pursue a particular career. The 1-5 ratings scale was:

- 5 - very important;
- 4 - some importance;
- 3 - neutral;
- 2 - little importance;
- 1 - very unimportant.

These results were then analysed by Chi-square tests.

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<sup>2</sup> The factors were based on the results of surveys of teachers by Stokes (2005), along with studies by Dinham and Scott (1997) and in the USA by National Center for Education Statistics (1997). Some adjustments have been made to make the factors more generic for some other occupations.

## **A Description of the Sample**

The survey provided data on 410 respondents, comprising 201 first year students (49.0 percent), and 209 third/final year students (51.0 percent). The gender balance was made up of 127 (40.2 percent) males and 141 (59.8 percent) females. The highest percentage of students (46.3) was in the age group under 21 years, followed closely by the 21-29 age group (42.2). There were less than three percent of students over forty years of age.

The sample group demonstrated a range of university admission types. The majority (80 percent) relied on the University Admission Index (UAI) although it is likely that at least some of the students with UAI's less than 50 would have relied on other forms of entry such as TAFE or work experience to assist their entry. Twelve point nine percent of all respondents had UAI's in the top decile of 90–100, while a further 21.0 percent had UAI's ranging between 80-89. There was a spread of students residing throughout locations in NSW with 76.9 percent living in Sydney and 23.1 percent in the country and regional areas of Newcastle and Wollongong.

There was also a range of fields of study in the survey sample. The largest group (34.1 percent) had double degrees. These were predominately Education/Teaching degrees combined with Arts, although there were some, Arts/Commerce combined with Law. The other main groups had qualifications in Commerce/Business/Economics (22.9 percent), Arts (5.4 percent), Science/Mathematics (16.6 percent), Nursing (8.0 percent), and Education (8.3 percent). The students had attended schools across the three education systems, with 44.5 percent attending public schools, 36.6 percent Catholic schools, and 17.7 percent other private schools. The higher than normal percentage of respondents who attended Catholic schools could reflect the fact that the Australian Catholic University was one of the six universities that agreed to participate in the study. The final category of classification related to the respondents intentions to pursue a career as a teacher. Thirty two point four percent of those surveyed responded 'yes', 46.3 percent responded 'no', while a further 20.2 percent were 'unsure'.

## **Results and Discussion**

### *How Would Higher Teacher Salaries Affect Students' Career Choices?*

There were two questions in the survey that looked at the issue of whether students would become teachers, if teachers' salaries were higher, and what level of salary increase would be required for a student to decide to become a high school teacher. The real issue in looking at the responses is whether the students, who had said that they would not become teachers or were unsure about becoming teachers, would become teachers due to a salary increase and what level of salary increase would be required to achieve this.

The results showed that a salary increase of 10 percent would lead to 7.6 percent of those who did not plan to become high school teachers to plan to become teachers (Table 1). In addition 15.4 percent of those students who responded that they were unsure would also plan to become high school teachers.

It is also interesting to note that the third/final year students had a stronger response to the higher salaries in favouring a move to teaching than the first year students. While it could be argued that responding to the survey is different from making a career change

in real life, it is still very likely that higher relative salaries would attract university students away from other career choices to become high school teachers.

Table 1. Student intentions towards pursuing a teaching career and teachers' salaries

Pursue a career in teaching?	Year of study		Salary increase					More than 60%	Total
			10%	20%	40%	60%	60%		
No	1st year	N	3	11	19	10	14	57	
		% within year of study	5.3%	19.3%	33.3%	17.5%	24.6%	100.0%	
	3rd Year	N	5	12	17	8	6	48	
		% within year of study	10.4%	25.0%	35.4%	16.7%	12.5%	100.0%	
Total	N	8	23	36	18	20	105		
	% within year of study	7.6%	21.9%	34.3%	17.1%	19.0%	100.0%		
Unsure	1st year	N	5	15	13	4	4	41	
		% within Year of study	12.2%	36.6%	31.7%	9.8%	9.8%	100.0%	
	3rd Year	N	5	11	4	2	2	24	
		% within year of study	20.8%	45.8%	16.7%	8.3%	8.3%	100.0%	
Total	N	10	26	17	6	6	65		
	% within year of study	15.4%	40.0%	26.2%	9.2%	9.2%	100.0%		

The Chi-square test results showed that the effect of a salary increase on the intention to pursue a career in teaching was independent of the year group that was surveyed in all categories of response.

#### *What Factors Influence the Career Choices of University Students?*

The university students were asked to rate, on a 1-5 scale, the importance of 13 factors in determining their decisions to pursue a particular career. The 1-5 ratings scale was:

- 5 - very important;
- 4 - some importance;
- 3 - neutral;
- 2 - little importance;
- 1 - very unimportant.

While all of the factors listed were of some importance to the students, the most important factors in determining their decisions to pursue a particular career (Table 2), based on the mean scores, were:

- interest in the work (4.67);
- job satisfaction (4.59);
- job security (4.21);
- the attitude and support of the employer (4.20);
- desire to help others (4.04);
- level of salary (3.96);
- the support of their family (3.95); and

- the possibility of promotion (3.90).

The least important factors for students in deciding to pursue a particular career were:

- the attitude of the general public (3.13);
- number of holidays (3.34);
- hours of work (3.54); and
- a low level of stress (3.58).

Table 2. The importance of factors in students' decisions to pursue particular careers

Statistics	Level of salary	Job security	A low level of stress	Number of holidays	Hours of work	The attitude of peers and friends	The attitude and support of employer	The attitude of the general public	The support of your family	Interest in the work you do	Job satisfaction	The possibility of promotion	Desire to help others
N Valid	400	391	385	380	386	381	385	379	383	394	395	381	381
Missing	10	19	25	30	24	29	25	31	27	16	15	29	29
Mean	3.96	4.21	3.58	3.34	3.52	3.74	4.20	3.13	3.95	4.67	4.59	3.90	4.04
Median	4.00	4.00	4.00	3.00	4.00	4.00	4.00	3.00	4.00	5.00	5.00	4.00	4.00
Std. deviation	0.877	0.912	1.043	1.024	0.973	1.057	0.897	1.195	0.992	0.683	0.858	1.061	1.046
Skewness	-1.076	-1.258	-0.475	-0.080	-0.401	-0.572	-0.986	-0.187	-0.676	-2.562	-0.916	0.661	-1.045
Std. error of skewness	0.122	0.123	0.124	0.125	0.124	0.125	0.124	0.125	0.125	0.123	0.123	0.125	0.125
Kurtosis	1.872	1.586	-0.182	-0.561	-0.107	-0.370	0.399	-0.843	-0.231	7.751	12.415	8.148	0.624
Std. error of kurtosis	0.243	0.246	0.248	0.250	0.248	0.249	0.248	0.250	0.249	0.245	0.245	0.249	0.249

*Factors Influencing the Career Choices of University Students Regarding Teaching*

It is most likely that the relative importance of the factors that influence a person in their career choice will vary from person to person. It is therefore important to consider, if there are differences in the relative importance of these factors, between those who intend to pursue a career as a teacher and those who are unsure or do not intend to pursue teaching as a career.

The results in Table 3 show that there were considerable differences in the importance of some factors between those who intended to pursue a career as a teacher and those who were unsure or did not intend to pursue teaching as a career.

Table 3. Factors influencing career choice and intention to teach summary table

Factors	Chi-square	df <sup>a</sup>	Asymp. Sig. (2-sided)	Intend to teach (mean)	Do not intend to teach (mean)	Intention unsure (mean)
Level of salary	10.63	6	0.100	3.84	4.07	3.88
Job security	6.973	6	0.323	4.36	4.18	4.08
A low level of stress	6.429	8	0.599	3.51	3.57	3.77
Number of holidays	15.27	8	0.054	3.54	3.16	3.46
Hours of work	6.568	8	0.584	3.63	3.50	3.44
The attitude of peers and friends	3.176	8	0.919	3.81	3.70	3.74
The attitude of employer	4.294	8	0.830	4.26	4.16	4.17
The attitude of the general public	28.43	8	0.000	3.30	2.95	3.21
The support of your family	6.802	8	0.558	4.03	3.88	4.01
Interest in the work you do	7.925	4	0.094	4.80	4.61	4.58
Job satisfaction	8.740	8	0.365	4.69	4.57	4.46
The possibility of promotion	10.60	8	0.225	3.75	4.06	3.79
Desire to help others	30.16	8	0.000	4.39	3.82	3.95

(a) The degrees of freedom have been adjusted where necessary to ensure the accuracy of the results.

There were highly significant differences in the importance of factors in making career choices between the three categories of students in regard to two factors that had Pearson Chi-square results that were significant at the one percent level (Table 3). These factors were:

- attitude of the general public; and
- the desire to help others.

(i) Attitude of the general public

The results show that students who intended to become teachers considered that the attitude of the general public towards their career was more important than those who did not intend to teach. Nineteen point seven percent of students who intended to become teachers considered that the attitude of the general public towards their career was ‘very important’ compared to 9.6 percent of those who did not intend to become teachers and 7.9 percent of those who were unsure. In addition only 3.9 percent of students who intended to become teachers considered that the attitude of the general

public towards their career was ‘very unimportant’ compared to 16.8 percent of those who did not intend to become teachers and 11.8 percent of those who were unsure. The importance to the students, who intended to become teachers, of the attitude of the general public towards their career could prove a problem when they enter teaching. Research by Stokes (2005) showed that, overall, teachers were not happy with the attitude of the general public towards them. This could discourage some of these students when they become teachers and lead to lower satisfaction levels and perhaps contribute to increased resignations.

(ii) The desire to help others

The results show that for students who intended to become teachers, the desire to help others was more important, than for those who did not intend to teach. More than half (57.6 percent) of the students who intended to become teachers considered that the desire to help others was ‘very important’ compared to 33.9 percent of those who did not intend to become teachers and 33.3 percent of those who were unsure. The desire to help others is an important distinguishing characteristic between the groups. The students, who intended to teach, ranked desire to help others as more important than the level of salary (means of 4.39 and 3.84 respectively). Teachers may be prepared to accept lower relative wages in exchange for the satisfaction they expect to receive from helping others. The group who did not intend to become teachers considered the level of salary as a higher priority in their career choice not just in comparison to those who intended to teach but as an overall level of importance compared to the desire to help others (Table 3). The unsure group ranked desire to help others slightly more important than the level of salary.

There were also significant differences (at the 10 percent level) in the importance of factors in deciding careers between the three categories of students in regard to three other factors (Table 3). These factors were:

- level of salary;
- number of holidays; and
- interest in the work you do.

(iii) Level of salary

As mentioned in the previous section there is a significant difference in the importance of salary, between the three groups. The results show that students who intended to become teachers considered that in choosing a career the level of salary was less important than those who did not intend to teach. Seventy nine point three percent of the students who did not intend to become teachers considered that the level of salary was ‘very important’ or of ‘some importance’ compared to 73.2 percent of those who intended to become teachers and 78.8 percent of those who were unsure.

(iv) Number of holidays

The number of holidays is a more important factor and obviously an area of attraction for those who intend to become teachers. The results show that more than half (52.0 percent) of the students who intend to become teachers considered that the number of holidays was of ‘some importance’ or ‘very important’ compared to 36.3 percent of

those who did not intend to become teachers and 46.1 percent of those who were unsure.

Changes in the relative numbers of holidays or the timing of holidays could have a considerable impact on the numbers of students who pursue careers in teaching. An obvious advantage for students who become teachers is the ability to have holidays at the same time as their children, should they have any. In addition teachers have more holidays than most other occupations. It could be considered that some of those who become teachers trade-off the larger number of holidays in exchange for a higher salary in another occupation.

(v) Interest in the work

Interest in the work is also a more important factor for those who intend to become teachers compared to the other two groups. The results show that 82.8 percent of the students who intend to become teachers considered interest in the work was ‘very important’ compared to 73.2 percent of those who did not intend to become teachers and 69.6 percent of those who were unsure. Research by Stokes (2005) showed that interest in the subjects that teachers taught was a very important consideration in their level of job satisfaction. This seems to also apply to those who intend to become teachers. It is possible that, if teachers are teaching outside their field of interest, this could reduce their levels of satisfaction and lead to resignations.

Overall it appears students who intend to be teachers are prepared to trade-off certain conditions of employment, such as relative salary for other nonwage amenities, especially, the desire to help others, holidays and interest in the work. In turn, those who do not intend to become teachers have different preferences (and as a result indifference curves) and salary is a more important consideration than desire to help others, holidays, the attitude of the general public, and interest in the job.

*Do University Students’ Attitudes to Pursuing a Teaching Career Vary between Genders?*

ABS data (2004) shows that there is an increasing proportion of females in high school teaching compared to men. In addition the survey of university students showed that more female students were likely to become teachers than male students (Table 4).

Table 4. Gender and intention to teach

Gender		Pursue a career in teaching?			Total
		Yes	No	Unsure	
Male	N	46	78	36	160
	% within gender	28.8%	48.8%	22.5%	100.0%
Female	N	84	111	44	239
	% within gender	35.1%	46.4%	18.4%	100.0%
Total	N	130	189	80	399
	% of total	32.6%	47.4%	20.1%	100.0%

Thirty five point one percent of the female students surveyed said that they intended to pursue a career as a high school teacher compared to 28.8 percent of male students surveyed. There was, however, a higher proportion of male students who were unsure

about becoming high school teachers, 22.5 percent compared to 18.4 percent of females. It should be noted though that the Chi-square tests show that the results are not significant at the 10 percent level.

Another consideration raised by Stokes (2005) related to the influence of salaries on the decisions of male and female teachers in pursuing careers in teaching. The results showed that the proportion of males in teaching was declining, accompanying a larger decline in wage relativities, compared to females. In addition research by Lewis and Butcher (2002), in Catholic high schools in Sydney, showed that male high school students were more influenced by the level of salaries compared to females in considering careers in teaching.

It could be expected that higher salaries may attract more males into teaching compared to females. The university student survey results (Table 5) show that a 20 percent increase in salaries could encourage 64.5 percent of male university students, who were unsure about their intention to become teachers, to decide to become teachers. A similar salary increase would only encourage 45.5 percent of the female students who expressed 'unsure' intentions to become teachers, to decide to become teachers. A salary increase of more than 40 percent would have minimal effect on increasing the number of 'unsure' male students to become teachers (12.9 percent) but would have a greater effect on the number of 'unsure' female students (24.3 percent). For those students who responded that they did not intend to become teachers, a salary increase of 20 percent would encourage only 27 percent of male students and 31.4 percent of female students to change their intentions. A salary increase of at least 40 percent would be required to cause 64.8 percent of male students and 64.2 percent of female students in the 'no' category to change their intentions and to intend to become teachers.

Table 5. Gender and intention to teach related to salary increase

Gender	Pursue a career in teaching?		Salary increase					Total
			10%	20%	40%	60%	More than 60%	
Male	No	N	3	7	14	5	8	37
		% within pursue a career	8.1%	18.9%	37.8%	13.5%	21.6%	100.0%
	Unsure	N	5	15	7	3	1	31
		% within pursue a career	16.1%	48.4%	22.6%	9.7%	3.2%	100.0%
Female	No	N	5	16	22	13	11	67
		% within pursue a career	7.5%	23.9%	32.8%	19.4%	16.4%	100.0%
	Unsure	N	5	10	10	3	5	33
		% within pursue a career	15.2%	30.3%	30.3%	9.1%	15.2%	100.0%

The Chi-square test results also confirm that male university students are more strongly influenced by changes in salary than female students when considering their decisions to become high school teachers.

*Do University Students' Attitudes to Pursuing a Teaching Career Vary Across Discipline Areas?*

It is possible that the students' attitudes towards teaching vary across discipline areas. It might be expected that those students choosing subjects that have a wider range of alternative career options, such as Business/Commerce/Economics, may be less likely to choose teaching than those choosing subjects with a more limited range of job opportunities, such as Arts/Humanities. While these differences may not affect the overall number of teachers it does consider the issue of teacher shortages in particular subject areas, which is already a problem in some NSW high schools. The results show that there are considerable differences between fields of study and intentions to pursue a career as a teacher (Table 6).

Table 6. Field of study and intention to teach

Field of study		Pursue a career in teaching?			Total
		Yes	No	Unsure	
Education/Teaching	N	32	0	2	34
	% within field of study	94.1%	0.0%	5.9%	100.0%
Arts, Humanities	N	5	9	6	20
	% within field of study	25.0%	45.0%	30.0%	100.0%
Science, Mathematics	N	8	43	17	68
	% within field of study	11.8%	63.2%	25.0%	100.0%
Commerce, Business, Economics	N	9	71	10	90
	% within field of study	10.0%	78.9%	11.1%	100.0%
Double degrees	N	71	32	34	137
	% within field of study	51.8%	23.4%	24.8%	100.0%
Nursing	N	1	26	6	33
	% within field of study	3.0%	78.8%	18.2%	100.0%
Total	N	126	181	75	382
	% within field of study	33.0%	47.4%	19.6%	100.0%

The Chi-square tests show that the results are significant at the one percent level. While it might be expected that those who pursue qualifications in Education/Teaching would predominantly intend to pursue a teaching career (94.1 percent) and those enrolled in Nursing courses would not be likely to pursue a teaching career (78.8 percent), the other courses would have the scope to allow the pursuit of teaching as a career. The results show that a smaller percentage of students intended to pursue a teaching career, whose academic qualifications were broadly sought after in the community. In the area of Commerce/Business/Economics only 10.0 percent of students expressed an intention to pursue a teaching career, compared to 11.8 percent for Science/Mathematics and 25.0 percent for Arts/Humanities. If the students who responded 'yes' and 'unsure' are included, the percentages rise for Commerce/Business/Economics to 22.1 percent of students, compared to 36.8 percent for Science/Mathematics and 55.0 percent for Arts/Humanities. These results suggest that the level of alternative employment opportunities does impact on the likelihood of students pursuing teaching careers. This also suggests that teacher vacancies in areas with greater non-teaching employment

options may be more difficult to fill compared to those with fewer non-teaching employment options.

### *Did Students Attitudes Towards Teaching Change While at University?*

The third/final year students were also asked the question whether their attitude to becoming a teacher had changed since they began university. They were also asked, if their attitude had changed, whether it was more positive or more negative and the factors that had caused it to change. Forty three point five percent of the students responded that their attitude had changed. Of these 67 percent had a more positive attitude towards pursuing a career as a teacher and 33 percent a more negative attitude. The factors that had contributed to a more positive attitude towards pursuing a teaching career were:

- positive experiences during the teaching practicum;
- the quality of teaching at university;
- greater career opportunities, such as a shortage of Mathematics teachers;
- job security;
- having trained at university they feel 'better equipped and motivated' to cope as a teacher; and
- the positive influence of other students who want to be teachers in order to help others.

The factors that had contributed to the students having a more negative attitude towards pursuing a teaching career were:

- negative experiences during the teaching practicum relating to the students, e.g. classroom management and discipline;
- negative experiences during the teaching practicum relating to the teachers who were supervising them or other teachers in the school, especially in regard to a lack of support and 'disgruntled teachers';
- negative attitudes towards teaching in a school from university lecturers (some of whom were also current school teachers);
- complaints from teachers about salaries and conditions;
- practicum experiences showed that teaching was 'too hard';
- lack of resources in schools;
- high expectations places on teachers and little support in schools;
- child protection legislation is a concern as it creates a fear in teachers in how they can deal with students;
- lack of reward for the work of teachers as reflected in poor salaries;
- negative media perceptions of teachers; and
- the declining funding of public schools and the governments' attitudes towards public education.

The attitude of a number of the respondents is reflected in the following survey response.

I feel reluctant to become a teacher and join a 'sinking ship.'  
Conditions are getting worse and worse in our schools, especially for teachers. They are not respected or valued by government, society, or students. I have done well in my studies. I deserve better.

The issue of being able to support a family on the salary of a teacher was a concern expressed by a number of respondents. A number said that, while they wanted to be teachers, they would resign and pursue a higher paying career, if they could not properly support their families.

Overall the factor that had greatest influence on the students who initially intended to become teachers when they started university was the teaching practicum. Positive experiences on the practicum made the student more likely to become teachers, while many of the students who had negative experiences on the practicum had decided against pursuing a teaching career. While some of these potential teachers may not have been suited to teaching others were negatively affected by the lack of support from teachers during their practicum.

## **Conclusion**

University students have a variety of reasons for choosing a particular career or specifically choosing to, or not to, become a high school teacher. The reasons for becoming teachers are not dissimilar from those found by Richardson and Watt (2006). The reasons students would not become teachers is also diverse. Despite this the survey results showed that a salary increase of 10 percent, relative to other occupations, could lead to 7.6 percent of those who would not have become teachers to become high school teachers. In addition 15.4 percent of those students, who responded that they were unsure, would also have become high school teachers. A salary increase of at least 20 percent could have led to an increase in the number of teachers far beyond the likely requirements of the high school systems in NSW. Past the 20 percent salary increase, the marginal benefits of the increased salaries in terms of increased numbers of university students entering the high school teacher labour market declines.

Those students who intended to become teachers had different values in regard to the factors they considered most important in pursuing a career, compared to those who were unsure and those who had no intention to teach. Those who intended to become teachers ranked 'the desire to help others' much higher than the other two groups. This factor would be seen by those who intend to teach as a positive nonwage amenity. In order to increase the number of teachers in NSW high schools it would be necessary to improve the factors that were important to those who have responded that they would not teach or were unsure. The 'unsure' group is the one with responses most similar to the responses of those who intend to teach. To increase the proportion of the 'unsure' group who would become teachers, improvements in working conditions would be needed to compensate for the lower importance that they placed on 'the desire to help others'. Some areas where this could occur include improvements in the level of salary and the possibility of promotion. The perception of the attitude of the students towards teachers was also looked upon as being negative and the responses were considerably lower than those that were actually expressed by the school teachers themselves (Stokes 2005). An improvement in this perception and the student's perception of the attitude of the parents towards teachers could increase the likelihood of some of the 'unsure' group becoming teachers.

The attitude of university students towards pursuing a career in teaching changed for many of them, while at university. While for two thirds of the group it was more positive, one third became more negative and a number decided not to continue with

teaching. The main factor affecting those who were training to be teachers was the teaching practicum. Positive practicum experiences increased the likelihood of students becoming teachers while negative experiences either as a result of the behaviour or response of students or the negative reactions of current teachers lessened the likelihood of becoming teachers and in some cases ended their intentions to become teachers. This is an important issue that needs to be considered by school administrators and universities. An improved system of mentoring of students on practicum and a more positive attitude from teachers in schools could assist to increase the retention of university students in pursuing careers as teachers.

If the predicted future shortage of teachers is to be averted, not only is it important to keep the current teachers but the issues raised in this paper provide a guide as to what can be done to increase the intake of new teachers.

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