

**Submission  
No 23**

## **INQUIRY INTO THE RECRUITMENT AND TRAINING OF TEACHERS**

**Organisation:**

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**Theme:**

**Summary**

**Submission to**

**Inquiry into the Recruitment and Training of Teachers**

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I have just completed a seven and a half year study of the high school teacher labour market in NSW (for a PhD). Part of this study involved a review of potential teachers (university students) and their attitudes to becoming teachers. I have included the main finding of that study in this submission. While your inquiry is into the recruitment and training of teachers, an equally important issue, which I will also consider, is how do you keep the teachers that you have recruited in the first few years of teaching, who have the highest resignation rates.

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 2000 the proportion of higher education students studying Education declined from 21.3 percent to 10.6 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 (Department of Education Science and Training 2003).

There are a number of issues to be considered. First, what can be done to increase the overall level of university graduates entering teaching? Second, are there different factors that influence the decisions of male and female university graduates to enter the teacher labour market? Third, what factors influence the decisions of students to pursue careers in teaching compared to other careers? Finally, what perceptions do students have of a career as a teacher?

### **Surveys of University Students**

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.

Six universities through out NSW 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 students were asked to rate, on a 1-5 scale, the importance of various factors<sup>1</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 how they would rate the employment conditions for teachers in NSW high schools on a 1-5 scale.

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?
- If they became teachers, in what school system would they like to teach?

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<sup>1</sup> The factors were based on the results of surveys of teachers in Chapter 6 (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.

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?

### **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 (Q.11), and what level of salary increase would be required for a student to decide to become a high school teacher (Q.12). 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 (Q9), 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 relative 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. 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.

## **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 1), 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 1 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 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 2 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 2 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.

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. Other research showed that overall teachers were not happy with the attitude of the general public towards them (Stokes 2005). This could discourage some of these students when they become teachers and lead to lower satisfaction levels and perhaps contribute to the level of resignations.

**(i) 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. The unsure group ranked desire to help others slightly more important than the level of salary.

There were also significant differences in the importance of factors in deciding careers between the three categories of students in regard to three other factors (Table 2). These factors were:

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

## **(ii) 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.

**(iii) 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.

**(iv) 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. In earlier research, teachers’ responses showed that interest in the subjects they 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 that 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 salary is a more important consideration than desire to help others, holidays, the attitude of the general public, and interest in the job.

### **How Did the Students Rate Employment Conditions in NSW High Schools?**

The university students were also asked to rate, on a 1-5 scale, their perceptions of the employment conditions of teachers in NSW high schools based on 12 factors. The 1-5 ratings scale was:

- 5 - well above average;
- 4 - above average;
- 3 - average;
- 2 - below average;
- 1 - well below average.

Students' perceptions of the employment conditions of teachers varied considerably between factors but the overall perception of the students was that the conditions were slightly above average, as shown with a job satisfaction rating of 3.34. This figure may over-estimate the level of job satisfaction as 32.4 percent of the sample group reported their intention to become a high school teacher, when the actual percentage of Education graduates who go on to teach is approximately 10 percent. The employment

conditions of teachers that the university students considered were the most favourable, (Table 3) based on the mean scores, were:

- number of holidays (4.12);
- job security (3.88);
- hours of work (3.47);
- attitude of peers (3.36); and
- the support of their employer (3.26).

The employment conditions of teachers that the university students considered were the least favourable were:

- level of salary (2.73);
- possibility of promotion (2.75);
- attitude and support of the students (2.90); and
- attitude of the general public (2.95).

The level of stress for teachers was considered above average (3.51), which would also be seen as a negative factor.

The only factor that the university students showed considerable difference in their assessment of high school teacher working conditions in NSW, compared to the teachers themselves, was in regard to the attitude and support of students. Teachers themselves found the attitude and support of students favourable (3.55), while university students rated this less favourable (2.90).

The overall perception that teachers had lower than average wages and lower than average possibilities for promotion would generally discourage university graduates that considered these factors as important in their career choices.

**Table 3 University Student Views on Teachers' Working Conditions**

Statistics		Level of salary	Job security	Level of stress	Number of holidays	Hours of work	The attitude of peers	The attitude of students	The support of employer	The support of pupils' parents	The attitude of the general public	The possibility of promotion	Job satisfaction
Number	Valid	382	380	379	383	380	370	376	370	368	372	373	378
	Missing	28	30	31	27	30	40	34	40	42	38	37	32
Mean		2.73	3.88	3.51	4.12	3.47	3.36	2.90	3.26	3.00	2.95	2.75	3.34
Std. error of mean		0.051	0.042	0.053	0.049	0.050	0.043	0.048	0.046	0.044	0.050	0.048	0.054
Median		3.00	4.00	4.00	4.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Std. deviation		1.004	0.810	1.035	0.955	0.973	0.835	0.922	0.883	0.837	0.970	0.923	1.051
Skewness		0.291	-0.324	-0.572	-0.967	-0.219	-0.006	0.269	0.080	0.107	0.072	0.176	-0.188
Std. error of skewness		0.125	0.125	0.125	0.125	0.125	0.127	0.126	0.127	0.127	0.126	0.126	0.125
Kurtosis		-0.003	-0.116	0.000	0.420	-0.145	0.183	-0.016	0.257	0.188	-0.308	0.020	-0.289
Std. error of kurtosis		0.249	0.250	0.250	0.249	0.250	0.253	0.251	0.253	0.254	0.252	0.252	0.250



## **How Do University Students' Views on Teachers' Working Conditions Vary Depending on their Intention to Teach?**

It could be expected that students who intend to teacher would have more positive views about the working conditions of teachers than those who do not intend to teach or are unsure. It is important to consider, if there are differences in the views of the three groups in regard to the working conditions of teachers, as this could influence the likelihood of students training to become teachers or pursuing a career as a teacher.

The results in Table 4 show that there were considerable differences in the impressions that the students had in regard to the levels of conditions 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 4 University Student Views on Teachers' Working Conditions and Intention to Teach Summary Table**

Working conditions	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	40.32	8	0.000	2.42	2.84	2.96
Job security	8.499	6	0.204	3.85	3.87	3.95
Level of stress	7.021	8	0.534	3.57	3.40	3.64
Number of holidays	33.70	6	0.000	3.91	4.28	4.12
Hours of work	22.56	8	0.004	3.58	3.42	3.40
The attitude of peers	12.78	8	0.120	3.42	3.32	3.36
The attitude of students	4.612	8	0.798	2.92	2.87	2.91
The support of employer	14.82	8	0.063	3.40	3.14	3.31
The support of pupils' parents	10.49	8	0.233	2.94	3.01	3.09
The attitude of the general public	18.24	8	0.020	2.72	3.07	3.04
The possibility of promotion	8.659	8	0.369	2.73	2.72	2.74
Job satisfaction	15.10	8	0.057	3.57	3.20	3.34

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

There were highly significant differences in the impressions of the three categories of students in regard to the levels of teachers' working conditions for three of the factors.

These factors were:

- level of salary;
- number of holidays; and
- hours of work .

**(i) Level of salary**

It is interesting to note that the students who intend to become teachers consider that teachers' salaries are considerable lower than those who do not intend to teach or are unsure (Table 5).

**Table 5 Level of Salary and Intention to Teach**

Pursue a career in teaching?		Level of salary					Total
		Well below average	Below average	Average	Above average	Well above average	
Yes	Count	25	43	48	5	7	128
	Expected count	14.2	36.8	55.4	13.5	8.1	128.0
	% within pursue a career	19.5%	33.6%	37.5%	3.9%	5.5%	100.0%
No	Count	9	52	83	16	13	173
	Expected count	19.2	49.8	74.9	18.3	11.0	173.0
	% within pursue a career	5.2%	30.1%	48.0%	9.2%	7.5%	100.0%
Unsure	Count	8	14	33	19	4	78
	Expected count	8.6	22.4	33.8	8.2	4.9	78.0
	% within pursue a career	10.3%	17.9%	42.3%	24.4%	5.1%	100.0%
Total	Count	42	109	164	40	24	379
	Expected count	42.0	109.0	164.0	40.0	24.0	379.0
	% within pursue a career	11.1%	28.8%	43.3%	10.6%	6.3%	100.0%

More than half (53.1 percent) of the students who intended to become teachers considered that the salary of teachers was 'well below average' or 'below average' compared to 35.3

percent of those who did not intend to become teachers and 28.2 percent of those who were unsure. This difference could reflect the view of those who intend to become teachers that they consider that teachers are lowly paid for the work they do, or on the other hand, the other groups consider the teachers' salaries are average for what they do. It could also suggest a difference in knowledge of the salaries of teachers. It could be expected that those who intend to become teachers may be more aware of the actual salaries of teachers. Those who intend to become teachers are actually closest to the results of the teachers in expressing their below average level of satisfaction with their salary (Stokes 2005).

**(ii) Number of holidays**

Again the students who intend to become teachers did not rate the conditions of teachers, in this case the number of holidays, as highly as those who do not intend to teach or were unsure. Only 25.8 percent of the students who intended to become teachers considered that the number of holidays was 'well above average' compared to 55.1 percent of those who did not intend to become teachers and 44.2 percent of those who were unsure. This positive attitude towards the number of holidays that teachers have could be useful in attempting to encourage the 'no' group and the 'unsure' group to pursue a teaching career. Advertising campaigns promoting good teacher working conditions could encourage more teachers. This consideration will be explored further later in this submission.

**(iii) Hours of work**

A higher proportion of the students who did not intend to become teachers or were unsure considered that teachers' hours of work were 'below average' or 'well below average'

compared to those who intended to become teachers. Only 3.2 percent of the students who intended to become teachers considered that the hours of work were 'below average' or 'well below average' compared to 17.7 percent of those who did not intend to become teachers and 16.0 percent of those who were unsure.

While a proportion of the students who did not intend to become teachers or were unsure considered the hours of work of teachers were less than average, there was also a considerable proportion that considered that the hours of work were 'well above average'. Eighteen point nine percent of those who did not intend to become teachers and 14.7 percent of those who were unsure considered the hours of work as well above average compared to 13.3 percent of those who intended to become teachers. Obviously for some of these students the perceived hours of work of teachers are seen as a negative feature of the career.

There was also a significant difference in regard to the attitude of the general public between the three categories of students in regard to teachers.

#### **(iv) Attitude of the general public**

Again the students who intend to become teachers rated the working conditions of teachers, in this case the attitude of the general public, lower than those who do not intend to teach or are unsure.

Forty four point eight percent of the students who intended to become teachers considered that the attitude of the general public toward teachers was 'below average' or 'well below

average' compared to 25.3 percent of those who did not intend to become teachers and 24.4 percent of those who were unsure. The more positive responses from those who did not intend to teach or were unsure towards the attitude of the general public could be useful in attempting to encourage the 'no' group and the 'unsure' group towards pursuing a teaching career. The negative responses from those who expressed an intention to teach could be a factor that would discourage them from actually entering the teaching profession at a later time or could increase the pressure to resign, if they did become high school teachers.

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

Research shows that there are 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.

Another consideration relates to the influence of salaries on the decisions of male and female teachers in pursuing careers in teaching. Research shows that the proportion of males in teaching has declined, accompanied by 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 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.

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 Field of Study and Intention to Teach**

Field of study		Pursue a career in teaching?			Total
		Yes	No	Unsure	
Education/Teaching	Count	32	0	2	34
	Expected count	11.2	16.1	6.7	34.0
	% within field of study	94.1%	0.0%	5.9%	100.0%
Arts, Humanities	Count	5	9	6	20
	Expected count	6.6	9.5	3.9	20.0
	% within field of study	25.0%	45.0%	30.0%	100.0%
Science, Mathematics	Count	8	43	17	68
	Expected count	22.4	32.2	13.4	68.0
	% within field of study	11.8%	63.2%	25.0%	100.0%
Commerce, Business, Economics	Count	9	71	10	90
	Expected count	29.7	42.6	17.7	90.0
	% within field of study	10.0%	78.9%	11.1%	100.0%
Double degrees	Count	71	32	34	137
	Expected count	45.2	64.9	26.9	137.0
	% within field of study	51.8%	23.4%	24.8%	100.0%
Nursing	Count	1	26	6	33
	Expected count	10.9	15.6	6.5	33.0
	% within field of study	3.0%	78.8%	18.2%	100.0%
Total	Count	126	181	75	382
	Expected count	126.0	181.0	75.0	382.0
	% within field of study	33.0%	47.4%	19.6%	100.0%

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.

### **How Did Extrinsic Factors Influence the Students’ Decisions to Pursue a Career in Teaching?**

The students were questioned about the influence of four extrinsic factors on their decisions to pursue careers as teachers (Q.10 and Q.14). The four factors were:

- i. the attitude of teachers at their school towards teaching;
- ii. the attitude of their parents;
- iii. their own experience of school; and
- iv. their own experience at university.

Research carried out by Lewis and Butcher (2002) in schools in Sydney showed that the first three factors did influence students’ career choices. The students were asked to rank the type of influence of the first three factors in regard to their decision to become a teacher on a 1-5 scale:

5 – very positive;



4 – positive;

3 – neutral;

2 – negative;

1 – very negative.

**(i) The influence of the attitude of teachers at their school on students' decisions to become teachers**

The results show that there is a clear link between the attitudes of the students' own teachers towards teaching and the students' intentions to teach (Table 7). The students have obviously been influenced by the positive or negative attitudes of their own teachers. The results show that students whose teachers had influenced the students in a positive manner in regard to teaching were more likely to pursue a career in teaching than those whose teachers were negative. Out of the students who intended to pursue a teaching career 62.9 percent expressed the view that their teachers attitudes to teaching had influenced their decision to teach in a 'positive' or 'very positive' manner. Of those students who did not intend to become teachers only 43.5 percent expressed the view that their teachers' attitudes had influenced their decision to teach in a 'positive' or 'very positive' manner. While for those students who were unsure 51.3 percent expressed the view that their teachers' attitudes had influenced their decision to teach in a 'positive' or 'very positive' manner.

These results suggest that the attitudes of teachers not only affect their own teaching but may also have a long-term influence on the decisions of their students to become teachers in the future. Policies to deal with this issue would need to begin by creating a more positive attitude towards teaching in the teachers themselves.

**Table 7 The Attitude of Teachers and Intention to Teach**

Pursue a career in teaching?		Attitude of teachers					Total
		Very negative	Negative	Neutral	Positive	Very positive	
Yes	Count	3	10	34	36	44	127
	Expected count	5.3	13.9	41.6	36.6	29.5	127.0
	% within pursue a career	2.4%	7.9%	26.8%	28.3%	34.6%	100.0%
No	Count	10	23	54	45	22	154
	Expected count	6.5	16.8	50.5	44.4	35.8	154.0
	% within pursue a career	6.5%	14.9%	35.1%	29.2%	14.3%	100.0%
Unsure	Count	2	6	29	22	17	76
	Expected count	3.2	8.3	24.9	21.9	17.7	76.0
	% within pursue a career	2.6%	7.9%	38.2%	28.9%	22.4%	100.0%
Total	Count	15	39	117	103	83	357
	Expected count	15.0	39.0	117.0	103.0	83.0	357.0
	% within pursue a career	4.2%	10.9%	32.8%	28.9%	23.2%	100.0%

**(ii) The influence of the attitude of their parents on students decisions to become teachers**

The results also show that there is a clear link between the attitudes of the students' parents towards teaching and the students' intentions to teach. The students have obviously been influenced by the positive or negative attitudes of their parents. The results show that students whose parents had influenced them in a positive manner in regard to teaching were more likely to pursue a career in teaching than those whose parents were negative. Out of the students who intended to pursue a teaching career 54.9 percent expressed the view that their parents attitudes had influenced their decision to teach in a 'positive' or 'very positive' manner. Of those students who did not intend to become teachers only 32.0 percent expressed the view that their parents' attitudes had influenced their decision to teach in a 'positive' or 'very positive' manner. While for

those students who were unsure 46.8 percent expressed the view that their parents' attitudes had influenced their decision to teach in a 'positive' or 'very positive' manner. While it is likely some of these respondents may not have considered teaching as a career at all and as a result the option may not have been discussed with their parents, the attitude of parents towards teaching does seem overall to have an influence on the attitudes of their children and the career decisions that their children make. A more positive attitude towards teaching as a career from the parents could increase the number of teachers in schools. This is an issue education authorities may need to address.

**(iii) The influence of their own experience of school on students' decisions to become teachers**

As might be expected, the students own experiences of school had an influence on their decisions to teach. The results show that students who had less positive experiences of school were less likely to pursue a career in teaching than those who had more positive experiences. Out of those students who did not intend to become teachers only 44.8 percent expressed the view that their own experiences of school had influenced their decision to teach in a 'positive' or 'very positive' manner. Of the students who intended to pursue a teaching career 61.7 percent expressed the view that their own experiences of school had influenced their decision to teach in a 'positive' or 'very positive' manner. While for those students who were unsure, 63.7 percent expressed the view that their own experiences of school had influenced their decision to teach in a 'positive' or 'very positive' manner.

For students who had 'very negative' or 'negative' experiences of school their intentions not to teacher were much higher. Of those students who did not intend to become teachers

24.0 percent expressed the view that their own experiences of school had influenced their decision to teach in a ‘negative’ or ‘very negative’ manner. Of the students who intended to pursue a teaching career only 10.9 percent expressed the view that their own experiences of school had influenced their decision to teach in a ‘negative’ or ‘very negative’ manner. While for those students who were unsure, 18.2 percent expressed the view that their own experiences of school had influenced their decision to teach in a ‘negative’ or ‘very negative’ manner. The positive aspect of this in regards to students pursuing careers as teachers is that overall 55.1 percent of the university students surveyed had ‘positive’ or ‘very positive’ attitudes to becoming teachers from their own experiences of school.

It is likely that the teachers who taught them influenced the students’ experiences of school. A more positive teaching environment would most likely improve the experiences of students at school and increase their likelihood to become teachers. This issue is linked to policies to improve the level of satisfaction of teachers and the overall quality of their teaching.

**(iv) How has the experience at university influenced the students’ attitudes towards teaching as a career?**

The third/final year students were also asked the question whether their attitude to becoming a teacher had changed since they began university (Q.14). They were also asked, if their attitude had changed, whether it was more positive or more negative (Q15.) and the factors that had caused it to change (Q.16). 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 not to pursue a teaching career any longer. 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. This is an issue that will be pursued in regard to policy implications in this submission.

In order to attract and keep quality teachers in NSW schools there are a number of policy recommendations.

### **Policy recommendation 1**

The Australian Government should increase the number of secondary trainee teacher places at universities. These should not only be in areas of current curriculum shortage but in areas of likely future curriculum shortages.

In an attempt to increase the number of students who become teachers the NSW Government implemented the *Teach NSW* program with their marketing slogan ‘Teach and make a difference.’ This program appears to have had some initial success with the number of applications for teacher education courses rising in 2004. The number of teacher education places, however, is set by a quota for each university by the Australian Government. Increased applications had the effect of increasing the cut-off marks to get into teaching courses. The problem is that while this may increase the quality of teachers going into the schools it will not necessarily increase the numbers of teachers. While there has been some increase in the number of teacher education places allocated this has not kept pace with the likely future demand for teachers.

### **Policy recommendation 2**

The Australian Government should adopt a policy that all university graduates who become teachers should be subject to the same Higher Education Contributions. The graduates who become teachers should have all their subjects charged at the Education (Band 1) rate and only be liable for contributions for a period of four years of higher education.

While teachers are paid the same salaries, irrespective of the subjects that they teach and are qualified in, the cost of gaining these qualifications varies depending on the subjects the teachers study. This is a disincentive for some students studying in some subject areas (such as Economics, Business, Mathematics, Science and Computing) to become teachers.

### **Policy recommendation 3**

The NSW State Government and other education system administrators should encourage increased labour market flexibility by:

- allowing schools to offer higher salaries to attract teachers in areas of shortage;
- allowing paid overtime of current staff to fill shortages; and
- paying bonuses and performance loadings to the best performing teachers.

There are a number of ways that increased labour market flexibility could increase the availability and quality of staff in high schools in NSW. First, schools in NSW should be given finances that reflect their particular circumstances. Schools in more socially disadvantaged areas, that have difficulty attracting teachers, should be given greater



funding per pupil to improve resources and to pay higher salaries for teachers to teach in those school. School principals should have the financial resources to attract staff by offering higher salaries to teachers in areas of geographical and discipline shortages.

Second, in areas where there are teacher shortages, teachers could receive paid overtime to take extra classes. It is better for a specialist in an area to take a class than someone teaching out of their field. This may require some restructuring of the traditional school day of 9am to 3pm to one of 8am to 4pm. There is already considerable evidence that many teachers work in outside employment to earn additional income (Stokes 2005). Many would probably welcome the opportunity to earn additional income from teaching rather than in outside employment such as cleaners or waiters. This would be budget neutral as the teachers are replacing other less qualified teachers who would have been employed to take the classes. This would not only be a benefit to the teachers but also to the pupils.

Third, so as to improve the retention rate of the most capable teachers, bonuses and performance loadings could be paid to the best performing teachers. While measurements of teacher productivity are very difficult to make and generally controversial, teacher appraisals similar to those applying in many organisations in Australia would be possible. These appraisals are generally carried out by a supervisor and are measured based on set performance criteria and outcomes. These could include some element of peer appraisal and even parental and student appraisal in measuring the teacher's performance. The use of parental appraisal could improve the attitude of parents to teachers, and the work the teachers do, and the remunerations the teachers

receive. The use of performance loadings has achieved improved outcomes in business organisations and it is likely that such policies would improve the performance of teachers and the educational outcomes for the students. The higher remuneration would also be an incentive to remain in teaching.

#### **Policy recommendation 4**

The Department of Education and Training and other school administrators in NSW should adopt a number of initiatives that would assist new teachers in their early years of teaching. These include:

- (a) a formal induction process;
- (b) a mentor teacher; and
- (c) reduced face-to-face teaching time in the first year of teaching.

Some of these are already in place in some schools, but not in all schools or systems.

- (a) A formal induction process

An induction process for teachers can take many forms in some instances it may not be much more than introductions to colleagues and being shown around the school. Ewing and Smith (2003) reported in their study of 196 beginning teacher graduates from the University of Sydney that the most often reported mentoring or induction, if any, was categorised as 'informal support'. Only 12 percent of the respondents reported systematic and regular sessions for the whole year. A further 13 percent reported regular sessions in the first two terms<sup>2</sup>. None of the respondents reported any continuation of induction sessions beyond the first year of teaching. In many cases the induction process was very

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<sup>2</sup> In NSW there is a four-term school year, so this would involve about 20 weeks of actual school time.

brief lasting just one day or a few sessions. Beginning teachers need continual assistance as they face new challenges and as they begin to develop their skills. A more formal and ongoing induction process is required for beginning teachers. This induction process should include the provision of a mentor.

(b) A mentor teacher

Schools need to have mentor teachers who can assist not only the beginning teachers but also the teachers in training who are placed in the school for practicums. While mentoring of beginning teachers is officially encouraged, by the major teaching authorities in NSW, Ewing & Smith (2003) reported that almost 40 percent of the beginning teachers surveyed reported that they did not have a mentor teacher. It was also reported that half the respondents also did not have a supervisor. Thus, for over half of the study's respondents, there was no teacher who was assigned to have a special responsibility for assisting the beginning teacher. Ewing & Smith stated that one of the reasons for this weakness stemmed from the lack of recognition or recompense for the role of the mentor. A promotional position of mentor teacher should be established. This person would have to complete training to learn how to be an effective mentor and they would be evaluated to see how well they carried out the mentoring process. This would provide a promotional position for experienced teachers who have much to offer as classroom teachers but who do not wish to become or are prevented from being administrators. The mentor teacher would have a formal weekly meeting with the beginning teacher to discuss issues in the teacher's development and adjustment to teaching. The mentor would also review the classes of the beginning teacher and offer assistance in improving their teaching performance. The cost of such a program would vary from year to year depending on the

number of new mentors and the number of retiring mentors. It could be expected that between five and ten percent of staff in a school could be mentors. They could be paid an allowance equal to half the rate of a teacher in charge of a key learning area in a DET school, this would be equal to \$1523 per annum as at 1/1/2005. The additional cost to the teaching wage bill would only be between 0.125 and 0.25 of a percent<sup>3</sup>.

(c) Reduced face-to-face teaching in the first year

The first year is generally the most difficult year for the beginning teacher, as they learn to adapt to the expectations of being a high school teacher. The normal load for a teacher in high schools in NSW is 20 hours of face-to-face teaching a week. This is quite a load for a new teacher who has to prepare new work for all their teaching subjects as well as learn how to adjust to the other demands of teaching. One way to alleviate this pressure would be to reduce the amount of face-to-face teaching for a beginning teacher to 16 hours a week in the first year. This would allow more time for preparation of lessons, marking etc. and time to seek assistance from their mentor teacher in developing their teaching. The estimated cost of such a program would vary from year to year depending on the number of first year teachers employed in high schools. Again the lack of available data on this is a problem. MCEETYA (2003) estimate that approximately 5.2 percent of public high school teachers in NSW left teaching completely in 2001 and needed to be replaced. They estimate that approximately 70 percent of the replacements came from new graduates. Based on these figures, a four-hour reduction for new graduate teachers would

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<sup>3</sup> This assumes that the average salary for a high school teacher as at 1/1/2005 would be approximately \$60,000 and between five and ten percent of teachers would be mentor teachers.

increase the teaching wage bill for NSW public high schools by less than 0.75 percent. The cost for non-government schools in NSW would most likely be slightly higher as they have a higher annual percentage of replacement teachers.

The overall cost of the recommendation to adopt a mentor teacher program and reduce face-to-face teaching for new graduates is likely to add only about one percent to the cost of teacher employment in NSW high schools. The possible benefits in terms of more satisfied beginning and experienced teachers and lower teacher resignation rates could easily outweigh the cost.

### **Policy recommendation 5**

School administrators should introduce policies that encourage more males to enter teaching. These policies include:

- more flexible salary/employment packages, and
- equal numbers of teacher scholarships for males and females.

While an increase in the relative wage of all teachers is likely to lead to an increase in the numbers of teachers, it is not necessarily going to improve the male/female teacher ratio. No doubt a policy that advocates salary increases for male teachers only, even though their earnings have been declining more in comparison to their male counterparts, would be considered as gender discrimination and illegal. An alternative approach is the development of salary/employment packages that suit the individual preferences of the teachers. For some this may involve longer periods of paid parental leave being traded off

for salaries. Other teachers may be willing to trade-off a part of their holidays for additional remuneration and visa versa. Policy recommendation 3, introduced earlier in this submission, advocating paid overtime, is more likely to benefit male teachers as they are already working on average longer hours in teaching, and a higher proportion of males seek additional income in other employment. This policy could act as an incentive to increase the proportion of male teachers in high schools.

In an attempt to increase the number of male primary school teachers, Sydney Catholic Education Office offered the same number of male and female teacher scholarships (to overcome anti-discrimination legislation). A similar policy could be implemented in regard to teacher scholarships in secondary education.

### **Policy recommendation 6**

Administrators should introduce policies that encourage more cooperation between teachers and the administrators of schools and provide more support for teachers. These policies could include:

- positive advertising campaigns dealing with the value of teachers to the community;
- improved industrial relations processes;
- more autonomy to public school principals and greater consultation between school administrators and teachers; and
- greater flexibility for teachers to move between schools.

First, positive advertising campaigns regarding the work and value of teachers to the community could not only encourage more university graduates to enter teaching but may also produce a more positive attitude from parents and the general public. If teachers feel that they are appreciated by their students, parents and the community in general, their overall level of satisfaction with teaching will be enhanced

Second, industrial relations disputes by their nature tend to be areas of conflict. There needs, however, to be more positive comments about the value of teachers in these disputes, while recognising the need to balance this with the budgetary constraints of the employer. In this environment the importance of nonwage amenities as a trade-off for higher wages is crucial.

Third, the issue of administration is more complex in the public school system. In the Catholic school system, and even more so in independent schools, the main administration impacting on teachers is school based. The principal is responsible for most, if not all, areas of employment and promotional appointments and administration in the school. The principal and staff have closer contact and decisions are generally made in consultation with each other. This tends to improve relationships between administration and teachers. The public school system should give greater autonomy to school principals to employ staff and decide on promotional appointments. More decision-making should also be made in consultation with the school community and not predominately at Departmental level. The possibility of community based school boards similar to those that exist in the USA, and in many private schools in NSW, could also improve the relationship with staff, parents and the public, if all three groups were represented on the boards.

Fourth, some conflict between school administration and individual teachers is always likely to occur. In the Catholic and independent school system, if teachers do not like the administration of the school or the school working environment then they can apply for a job at another school. The ability to change schools may increase the level of satisfaction of teachers and also reduce conflict in a school. It is more difficult to change between public schools. A teacher has to apply for transfer through a central registry and, if they are granted a transfer, they must remain in the school for a minimum of three years. Increased flexibility in the transfer system could increase teacher satisfaction. The current system is set up to ensure that teachers will be available in all schools in NSW, but it does not consider whether the teachers are teaching in their subject areas or whether they are happy to be teaching in that school. Greater flexibility in the transfer system accompanied by increased wage flexibility could ensure sufficient qualified teaching staff and more satisfied and productive teachers.

#### **Policy recommendation 7**

School system administrators should increase nonwage amenities for teachers and improve trade-offs between salaries and nonwage amenities.

Improvements in job satisfaction for workers could also occur as a result of greater flexibility in nonwage benefits. These may be achievable with little or no increase in school budgets. Many organisations have set benefits that apply to all workers. Greater utility could be achieved for some workers, if they were able to trade-off some of those benefits for increased wages and visa versa. Job sharing arrangements for parents with children is a common example of a trade-off that has already been implemented in a



number of schools that has provided a more satisfying working relationship for those teachers. Provisions such as salary sacrificing, trade-offs between work hours/holidays and wages, and maternity/paternity leave provisions could all improve teacher satisfaction, recruitment and retention rates, and the educational outcomes achieved by students.

### **Policy recommendation 8**

Trainee teachers on their practicum should also be given sufficient support and mentoring, and encouraged to become competent teachers. Schools should see the opportunity of having trainee teachers as a chance for teachers to share their experience with new teachers and also an opportunity to perhaps learn some new approaches to teaching from the trainees. Staff should be allocated to this process because of their ability and enthusiasm, not just for the extra income that can be earned.

**I am happy to provide further details of this study to the Committee and clarify any issues if so required.**