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THE SeMTAC PROJECT:

Attitudes of Year 12 Students and Their Parents to
Secondary Mathematics Teaching as a Career.

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Abstract

This paper reports on one aspect of a larger study into the factors which influence school leavers to consider, or not to consider, a career in secondary mathematics teaching. The study questioned Year 12 students, their parents, the mathematics teachers at their school, and students from Charles Sturt University-Mitchell studying to be secondary mathematics teachers. This paper concentrates on the responses of the Year 12 students and their parents. The responses are discussed using a "Key Factors" framework. These factors were those identified by a group of teachers in informal discussions before the major project started. The data indicates that there are several crucial factors militating against school leavers choosing secondary mathematics teaching as a career. Female students are more likely to express a preference for a career in mathematics teaching than are male students. This imbalance is exacerbated by the relatively small proportion of females choosing to study a level of school mathematics that will serve as an adequate prerequisite to university studies in mathematics. Males who study mathematics at these higher levels are much more likely than females, to choose to enter a profession other than teaching. Year 12 students are generally not interested in teaching as a career. Teachers are perceived by many as being poorly paid with poor working conditions and low social status. Poor behaviour of students is of major concern. Mathematics teaching as a career is generally not encouraged, either by careers advisers or parents. Indeed, some parents actively discourage teaching as a career choice.

The Project title "SeMTAC" is the acronym derived from "Secondary Mathematics Teaching as a Career". The SeMTAC project was a ten months'

study into the factors that influence school leavers to consider, or not to consider, a career in secondary mathematics teaching. In order to gather a comprehensive set of data, the following groups were surveyed:

- Year 12 students;
- their parents;
- all the mathematics teachers at their schools; and
- all secondary mathematics teacher education students at Charles Sturt University-Mitchell.

The Project was undertaken in ten Western Region secondary schools. In the schools, data were gathered from all Year 12 students in nine schools and Year 11 students in the tenth school, and cooperating parents of almost half of these students.

This paper presents that part of the SeMTAC project results which pertain to the responses of Year 12 students and their parents.

The Instruments

(a) The Year 12 Students' Questionnaire

This questionnaire was constructed to allow each respondent to provide:

- (i) Personal data (gender, age, type of school attended, HSC maths course, information on knowledge about C S U - Mitchell);
- (ii) Responses to 45 Likert Scale Items on teacher-related issues such as salaries, working environment, support for teaching, societal influences, government policies, curriculum change and the changing role of the mathematics teacher;
- (iii) If considering a career as a secondary mathematics teacher, responses to a further 6 Likert Scale Items; or

If not considering a career as a secondary mathematics teacher, the reasons for this decision;

- (iv) Reasons for continuing to Years 11 and 12; and
- (v) Ratings of the status of "Secondary Mathematics Teacher" in two lists of occupations, a list of 12 "Professional" occupations, and a list of 12 "General" occupations.

(b) The Year 12 Parents'/Guardians' Questionnaire

This questionnaire was constructed to allow each respondent to provide:

(i) Responses to 37 Likert Scale Items related to teacher-related issues such as salaries, working environment, support for teaching, societal influences, government policies, curriculum change and the changing role of the mathematics teacher;

(ii) Ratings of the status of "Secondary Mathematics Teacher" in two lists of occupations, a list of 12 "Professional" occupations, and a list of 12 "General" occupations.

Results - Year 12 Students

An analysis of the demographic data in Table 1 shows that the majority of students in the schools surveyed are studying mathematics at the Two-Unit, Mathematics in Society, or Mathematics in Practice levels. It is less likely that students studying at these levels will be capable of coping with secondary mathematics teaching as a career. Thus the proportion of the student population studying mathematics at a level from which potential secondary mathematics teachers are likely to be drawn is quite small.

Table 1 Student Numbers Classified by Gender and Level of Study of Mathematics.

		MALE (N = 323)					FEMALE (N = 391)		
P•	S	2	3	4	0	P	S	2	
	3	4	0						
20#	112	100	60	31	0	20	176	130	
	48	13	4						
6%†	35%	31%	19%	10%	0%	5%	45%	33%	
	12%	3%	1%						

• The abbreviations P S 2 3 4 0 denote the HSC Mathematics courses; Mathematics in Practice, Mathematics in Society, 2 Unit, 3 Unit and 4 Unit mathematics respectively. 0 denotes mathematics was not being studied at Year 12.

The numbers in this row are the total number of students studying mathematics at that level.

† The numbers in this row are the percentages of students of that gender studying mathematics at that level (eg 6% of the male students are studying Mathematics in Practice).

Not only does this table indicate the proportion from which secondary mathematics teachers are likely to be drawn but also shows that, while male

students represented only 45.2% of the total student population surveyed, they represented 12.7% of the population studying mathematics at 3 Unit and 4 Unit levels, compared with the figures for female students being 54.7% and 8.5% respectively. This finding would seem to indicate that females are prepared to study mathematics, but to a lesser extent at the higher levels than are males. Mathematics in Society and 2 Unit mathematics are the dominant choices for female students. In terms of potential secondary mathematics teachers the "pool" from which teachers-to-be are likely to be drawn is dominated by males.

The proportion of females studying mathematics at the higher levels (Table 1) and fact that 80.3% of the students perceived gender to be unimportant in one's ability to learn or teach mathematics (Factor 3 - discussed later) provides an interesting contrast worthy of further research.

Mathematics as a School Subject

Sizable proportions of the Year 12 students and the parents indicated that they see mathematics to be one of the most important school subjects (69.3% and 76.0% respectively). However, 56.6% of the Year 12 students disagreed that school students are interested in the mathematics which they are required to learn. These perceptions may be related to the opinions which the mathematics teachers and the Year 12 students have about the mathematics courses which Year 11 and 12 students are attempting; 87.6% of the teachers and 46.7% of the Year 12 students agreed that too many senior students are attempting mathematics courses beyond their capabilities. This belief was shared by 40.4% of the parents.

Secondary Mathematics Teaching (To teach or not to teach)

Of the 714 students surveyed for the Project, only 67 (9%) indicated that they were considering secondary mathematics teaching as a career.

In an attempt to investigate the reasons underlying the rejection of secondary mathematics teaching as a career the questionnaire contained an open-ended question inviting students to comment on why they rejected secondary mathematics teaching.

Only 26 (3.6%) of students provided written comments on why they were still considering secondary mathematics teaching as a career. Of the students who provided written comments: 1 student was studying Mathematics in Society, 13 were studying 2 Unit mathematics, 7 were studying 3 Unit mathematics and 5 were studying 4 Unit mathematics. There were 14 males and 12 females indicating an interest in secondary mathematics teaching. Of the 12 females, 8 were studying 3 Unit or 4 Unit mathematics.

It is disconcerting to note that of the 12 students considering secondary mathematics teaching as a career and providing written comments, 8 were females, leaving only 4 males (Table 2). The inferences that can be drawn from these data (Tables 1 and 2) are that males studying mathematics at the higher levels are more likely than females to choose a career other than

teaching, and that the provision of potential secondary mathematics teachers may possibly be enhanced by encouraging more females to study mathematics at the 3 Unit and 4 Unit levels.

Of particular interest are the comments of the 3 Unit and 4 unit students whose mathematical ability would make them most suitable for a career in secondary mathematics teaching.

Table 2 Students Considering Secondary Mathematics Teaching as a Career Who Provided Written Comments

N = 26

Maths in Society	2 Unit	3 Unit	4 Unit
1			
13			
7			
5			

The provision of written comments is interpreted as indicating a stronger commitment to secondary mathematics teaching as a career than an indication of an interest in secondary mathematics teaching career without a written comment. As such, the former probably serves as a more valid indicator of the number of potential entrants to secondary mathematics teacher education courses. If this is the case, since only 12 (see Table 2) of a total student population of 714 provided written comments on why they were considering secondary mathematics teaching as a career and were studying mathematics at a level (3 Unit / 4 Unit) that would give them a reasonable chance of success in a secondary mathematics teacher education course, the potential population for entry into a secondary mathematics teacher education course is limited.

An overall analysis of the responses of these groups of students revealed that no reasons for rejecting secondary mathematics teaching as a career were offered by 26% of 4 Unit males and 18% of 3 Unit males. For 4 Unit and 3 Unit females the corresponding percentages were 8% and 13% respectively.

Table 3 contains data on the more interesting comments.

Table 3 Summation of Student Reasons for Considering, or Not Considering, Secondary Mathematics Teaching as a Career. Classified by Gender and Level* of Study of Mathematics.

Male: 323	Female: 391	MATHEMATICS LEVEL
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60
31
323
20
176
130
48
13
4
391
714

* The abbreviations P S 2 3 4 0 denote the HSC Mathematics courses: Mathematics in Practice, Mathematics in Society, 2 Unit, 3 Unit and 4 Unit mathematics respectively. 0 denotes mathematics was not being studied at Year 12.

All 3 Unit and 4 Unit students considered that they were successful at mathematics. Most of these students also enjoyed mathematics. A relatively greater number of 3 Unit students expressed a lack of interest in mathematics teaching and considered teaching boring, lacking in challenge and unrewarding, than did 4 Unit students. This is disconcerting because it is probable that the 4 Unit students, who are presumably the better mathematicians, are more likely to enter professions other than teaching than are the 3 Unit students. This would certainly seem to be the case in relation to male students.

A significant proportion of 3 Unit and 4 Unit students stated that the poor behaviour of students was a major factor in their decision not to become a mathematics teacher. This poor behaviour is possibly associated with a widespread opinion among students, mathematics teachers, and parents, that too many students are studying mathematics at a level that is too difficult for them; the view of teachers that the existing curricula are inappropriate for many students; and recent statistics showing that, whereas in Australia in 1980 34.5% of students stayed on into Year 12, by 1990 this percentage had risen to over 64%. If there exist causal relationships among the proportion of students staying on to Year 12, the existing curricula, and the poor behaviour of students in Year 12 classes, there is a distinct probability if current trends continue, that an even smaller proportion of school leavers will opt to enter secondary mathematics teaching in the future.

Year 12 Students' Responses to the 45 Likert Scale Items.

A factor analysis was carried out on the students' responses to the 45 Likert Scale items contained in the Students Questionnaire. The eight factor solution provided interpretable scales.

The factors were identified as:

1. Students' perceptions of mathematics teachers and the way in which they carry out their work;
2. Students' perceptions of the working conditions of secondary mathematics teachers;
3. Gender issues and mathematics and mathematics teaching;
4. Students' perceptions of the parental support which they would receive if they undertook further study;
5. Students' attitudes towards mathematics as a subject;
6. Students' perceptions of the encouragement they have received to consider secondary mathematics teaching;
7. Students' perceptions of the classroom conditions teachers experience; and
8. Students' reasons for not considering secondary mathematics teachers as a career.

Table 4 has been compiled from the frequency distribution of summed scores on each factor. Each figure is a percentage of the number of students in the sample (N).

Table 4 Summary of the Percentages of the Year 12 Students Below, At or Above the "Neutral Position" on Each Factor

Factor (N)	Percentage Below "Neutral" Position	Percentage At "Neutral" Position	Percentage Above "Neutral" Position
1 (715)	38.9	10.8	50.3
2 (711)	43.9	15.5	40.6
3 (716)	80.3	10.8	8.9
4 (712)	8.0	14.9	85.1
5 (713)	47.4	12.2	40.4
6 (696)	89.7	4.3	6.0
7 (710)	33.5	10.3	56.2
8 (714)	50.6	11.1	38.4

Examination of the data in Table 4 indicates that while 85.1% of the students perceived that they would receive parental support to undertake tertiary studies (Factor 4), 89.6% of the students believed that they had received little encouragement from others to consider a career in secondary mathematics teaching (Factor 6). Parents are prepared to encourage and support their children in pursuing tertiary studies, but not secondary mathematics teaching.

Slightly over half of the students (56.2%) had positive perceptions of mathematics classroom conditions (Factor 7), yet were polarised with respect to their perceptions of the working conditions of secondary mathematics teachers (Factor 2), and in their attitudes towards mathematics (Factor 5).

Mathematics teachers and the way they carry out their work were perceived positively by half (50.3%) of the students (Factor 1). That half of the students did not have a positive perception is cause for considerable concern.

Over half (50.6%) of the students have declined to consider secondary mathematics teaching because of the possibility of remote area posting, the extra mathematics they would have to learn, potential ridicule from their friends and perceived misbehaviour of students in mathematics classrooms (Factor 8).

The factor analysis of the Year 12 student responses produced a factor (Factor 5) interpreted as students' attitudes towards mathematics. Examination of the frequency distribution of summed scores of their responses to the Likert Scale items indicates that 59.6 % of the students had either a neutral or negative attitude towards mathematics. Of the 40% of students who had a positive attitude towards mathematics, approximately 25% had considered or were considering secondary mathematics teaching as a career.

Results - Parents

Almost half (46.3%) of parents who were issued a survey questionnaire responded. A factor analysis was carried out on these Parents' responses to the 37 Likert Scale items contained in the Parents' Questionnaire. Various factor solutions were investigated for interpretability. The seven factor solution provided interpretable scales.

The factors were identified as:

1. Parents' perceived public image of mathematics teaching;
2. Parents' perceptions of the working conditions of secondary mathematics teachers;
3. Parental encouragement to consider secondary mathematics teaching and factors that influence that encouragement;
4. Parents' perceptions of the classroom conditions that teachers experience;
5. Factors which influence the extent to which parents offer support

to their offspring to consider teaching as a career;

6. The extent to which parents are aware of the opportunities in careers involving mathematics and in mathematics teaching in particular; and

7. Parents' perceptions of the nature of mathematics teaching and learning.

Table 5 has been compiled from the frequency distribution of summed scores on each factor. Each figure is a percentage of the number of parents in the sample (N).

Table 5 Summary of the Percentages of Parents Below, At or Above the "Neutral Position" on Each Factor

Factor (N)	Percentage Below "Neutral" Position	Percentage At "Neutral" Position	Percentage Above "Neutral" Position
1 (332)	28.0	13.6	58.4
2 (328)	27.7	7.9	64.3
3 (327)	52.0	16.8	31.2
4 (333)	33.0	9.9	57.1
5 (328)	59.5	19.8	20.7
6 (330)	36.1	17.9	46.1
7 (330)	62.1	12.7	25.2

The research team were surprised to find such a high proportion of the responding parents with positive perceptions of secondary mathematics teachers and secondary mathematics teaching. The findings that:

- 58.4% of parents have a positive impression of the way in which secondary mathematics teachers work is regarded by parents and the community (Factor 1);
- 64.3% of parents have positive perceptions of the general working conditions of secondary mathematics teachers (Factor 2);
- 57.1% of parents have positive perceptions of the classroom conditions under which secondary mathematics teachers work (Factor 4);

were unexpected, given the media's extensive adverse publicity over a lengthy period of time on issues such as education standards and industrial unrest.

An unexpectedly high proportion of parents (62.1%) indicated disbelief that mathematics is an especially difficult school subject i.e. harder to learn or teach than other subjects (Factor 7).

Despite these positive findings about parents' perceptions of mathematics teachers and mathematics teaching half (52.0%) of the parents (with 16.8% neutral) expressed negative perceptions of their activities in encouraging their offspring's entry into secondary mathematics teaching as a career (Factor 3). Somewhat over half of the parents (59.5% with 19.8% neutral) indicated doubt about the extent to which they would support (including financially) an offspring's tertiary study (Factor 5). This should be compared with the belief of 85.1% of students that their parents would support their tertiary studies.

In sharp contrast to the opinions of Year 12 students and secondary mathematics teachers, 85.1% of parents agreed that it is harder for girls to learn mathematics than it is for boys, despite the fact that they didn't perceive that mathematics was any more difficult to learn than any other school subject.

Encouragement to Enter Secondary Mathematics Teaching

In considering the role of the Careers Advisers, 62.2 % of the Year 12 students indicated that Careers Advisers do not encourage entry to secondary mathematics teaching as a career, with 30.8 % undecided. It would seem that in order to consider a career in a particular field, students need to have their attention directed. Careers advisers have an important role to play in this regard.

As mentioned previously, 85.1% of the students believe they would receive parental support to undertake further study. This support, however, appears to be directed towards courses other than those which are preparation for secondary mathematics teaching and stands in sharp contrast to three fifths of the parents having a negative view of the extent to which they would offer to support their offspring to consider teaching as a career.

Why is there so little encouragement for students to enter secondary mathematics teaching as a career? The answer to this question is far from simple; the lack of encouragement is probably the result of a combination of many variables, each of which is accorded varying importance from person to person.

The perceived status of secondary mathematics teachers may be one variable contributing to this lack of encouragement. Other variables which probably play a part include:

- the climate in mathematics classrooms;
- the morale of secondary mathematics teachers;
- the working conditions of secondary mathematics teachers;
- the salaries of of secondary mathematics teachers;

The Climate in Mathematics Classroom

Several classroom discipline related factors emerged as being important in students' decisions to enter or not to enter secondary mathematics teaching as a career.

Almost half of the parents (48.8%) and the Year 12 students (46.7%) agreed that school leavers are not interested in becoming secondary mathematics teachers because of what teachers have to put up with in their classrooms.

Over half (57.6 %) of the Year 12 students and 37.2 % of the parents agreed that increasingly school students are challenging the authority of teachers in mathematics classrooms, while 62.1 % of the Year 12 students and 54.2% of the parents agreed that maintaining a positive classroom atmosphere is a real problem in most secondary mathematics classrooms.

However the factor analyses associated with the Year 12 students and the parents ' responses to the Likert Scale items indicates that, overall, 56.2% of the Year 12 students and 57.1% of the parents had positive perceptions of the classroom conditions which teachers experience.

The Morale of Secondary Mathematics Teachers

Whilst the parents and the Year 12 students were not asked directly about the morale of secondary mathematics teachers, they were asked to respond to a number of related items, the results of which indicated some ambivalence towards the proposition that most secondary mathematics teachers appeared happy with their work.

The Working Conditions of Secondary Mathematics Teachers

The factor analysis of the Year 12 students' responses to the Likert Scale items revealed that there is ambivalence amongst the students concerning the working conditions of the secondary mathematics teachers. Table 4 shows that for Factor 2 (the working conditions of the secondary mathematics teachers) 40.6% of the students had positive perceptions but 43.9% had negative perceptions. The factor analysis of the parents' responses to the Likert Scale items reveals that 64.3% have positive perceptions of the teachers' working conditions. Perhaps in a climate of economic rationalism and high unemployment the working conditions of teachers are relatively satisfactory. A Western Region secondary principal has described teaching as "recession proof"; perhaps it is this aspect which students and their parents are focussing on. This positive perception by parents, however, does not seem to have influenced positively their attitude towards the choice of secondary mathematics teaching as a career choice for their offspring.

Despite the ambivalence of students and the relatively positive perceptions of parents in relation to working conditions, there are strongly held

opinions when it comes to employment conditions. Over 60.2% of the mathematics teachers disagree that teachers have good conditions of employment (however 34.3% agreed). On the same item, 67.1% of the parents and 57.6% of the Year 12 students agreed. Clearly, there is a mismatch in the perceptions of the teachers, and the Year 12 students and their parents.

With respect to promotion, 76.7% of mathematics teachers disagreed that opportunity exists for rapid promotion exists in the teaching profession. Amongst the Year 12 students, with 50.6% undecided, there is much uncertainty about this aspect.

The Salaries of Secondary Mathematics Teachers

In spite of salary increases awarded in early 1990, there appears to be uncertainty amongst the Year 12 students and their parents as to whether secondary mathematics teaching is a well paid profession; 48.3% of Year 12 students and 38.0% of the parents were undecided about this issue. However, 31.5% of the Year 12 students and 24.6% of the parents disagreed that secondary mathematics teaching is a well paid profession.

When asked to compare the salaries paid to secondary mathematics teachers with those available in other professions requiring tertiary mathematics, only 32.8% of the Year 12 students and 26.2% of their parents, agreed that the comparisons were not favourable. Once again there was uncertainty amongst Year 12 students and their parents with 56.8% of the Year 12 students and 43.4% of the parents being undecided.

The Perceived Status of Secondary Mathematics Teachers

All groups surveyed in the Project (except the C S U - Mitchell students) were asked to rank the status of Secondary Mathematics Teacher in two lists of twelve occupations, a "Professional" occupations list and a "General" occupations list. Tables 6 and 7 show the mean rankings (and standard deviations of the rankings) and overall ranking provided by all groups except the C S U - Mitchell students.

Table 6 The Perceived Status of "Secondary Mathematics Teacher" Within a List of "Professional" Occupations.

(The data in this Table is from all completed questionnaires).

N=714	STUDENTS
N=320	PARENTS
N=69	TEACHERS

	MEAN	
(S.D.)		
RANK	MEAN	
(S.D.)		
RANK	MEAN	
(S.D.)		
RANK		
Accountant	5.690	
(2.733)		
4	5.804	
(2.61)		
6	7.203	
(2.076)		
7		
Bank manager	6.579	
(2.850)		
7	6.660	
(2.792)		
8	7.221	
(2.642)		
8		
Computer scientist	5.849	
(2.878)		
5	5.406	
(2.875)		
3	5.290	
(2.230)		
5		
Engineer	6.063	
(2.990)		
6	5.628	
(2.589)		

5 4.609

(2.116)

4

Journalist 7.420

(3.221)

8 9.894

(2.338)

12 9.290

(3.117)

11

Lawyer 3.334

(2.566)

2 3.643

(2.616)

2 3.275

(2.319)

2

Medical doctor 3.103

(2.704)

1 2.352

(2.304)

1 2.478

(3.003)

1

Nurse 8.044

(3.190)

10 9.297

(2.862)

9 9.986

(2.494)

12

Pharmacist 7.425

(2.721)
9 6.160

(2.544)
7 6.449

(2.361)
6

Secondary mathematics teacher 9.838

(2.185)
12 8.391

(2.382)
10 8.536

(2.50)
9

Town/Shire clerk
 8.983

(2.906)
11 9.228

(2.788)
11 8.588

(2.913)
10

Veterinary surgeon 5.630

(3.145)
3 5.483

(2.945)
4 4.536

(2.405)
3

Amongst all three sets of results in Table 6, the occupation of Secondary Mathematics Teacher is perceived as having relatively low status, with Year 12 students ranking that occupation lowest in status (twelfth).

Table 7 The Perceived Status of "Secondary Mathematics Teacher" Within a List of "General" Occupations.

7 7.836

(2.274)

9

Engineer

3.964

(2.872)

2 2.903

(1.941)

2 1.940

(0.489)

2

Farmer

7.848

(3.276)

9 6.658

(2.959)

6

6.687

(2.819)

7

Forestry worker

7.030

(2.886)

8 8.608

(2.280)

9 8.015

(2.364)

10

Hotel/catering worker

7.006

(2.80)

7 8.727

(2.534)

10 9.152

(1.947)
12

Machine tool operator 8.803

(2.579)
12 8.473

(2.439)
8 9.048

(2.345)
11

Medical doctor
2.562

(2.864)
1 1.678

(1.931)
1 1.152

(0.361)
1

Miner
8.665

(2.828)
11 9.151

(2.491)
11 5.400

(2.119)
4

Sales person
8.255

(3.079)
10 9.606

(2.483)
12 7.750

(2.217)
8

Secondary mathematics teacher

6.767

(3.369)

6 4.082

(2.431)

3 5.646

(3.351)

5

Amongst the three sets of results in Table 7 the occupation of Secondary Mathematics Teacher is rated relatively highly by parents (third) and moderately highly by mathematics teachers and Year 12 students (fifth and sixth respectively). Note that Year 12 students perceive Secondary Mathematics Teacher status to be below that of Bank Officer (third), Airline Steward/Stewardess (fourth), and Clerical Worker (fifth).

The results of the rankings of the status of various occupations in two lists of twelve occupations (a "professional" and a "general" list) are cause for concern. The Year 12 students perceived the relative standing of secondary mathematics teachers to be the lowest in the list of twelve professional occupations and sixth in the list of twelve general occupations. The participating parents perceived the relative standing of secondary mathematics teachers to be tenth and third respectively, in the two lists.

Year 12 students are unlikely to want to enter secondary mathematics teaching on leaving school, given that they perceive teaching to have such low status. Similarly, parents/guardians are unlikely to encourage entry to this career when they too, perceive this occupation to be relatively low in status. Whilst there is an obvious need, therefore, to raise the perceived status of the secondary mathematics teacher, the methods by which this may be done are not so obvious.

Further information on the Project respondents' views on the status of secondary mathematics teachers may be gained by examination of the responses to the Questionnaire Likert Scale items related to the value placed on the work done by those in the occupation. Whilst 70% of the parents/guardians believed that parents are appreciative of the work that mathematics teachers do on behalf of their children, only about half of the Year 12 students agreed with this (about one third of Year 12 students were undecided on this issue).

Amongst the various groups involved in the Project only the parents/guardians registered moderately strong agreement that secondary mathematics teachers' work is highly regarded by the community (40.7% agreed). About half of the other three groups disagreed that it is highly regarded, with

strongest disagreement coming from the mathematics teachers (54.8 %).

Conclusion

It is evident from the summarised data presented in this paper that there are several crucial factors militating against school leavers choosing secondary mathematics teaching as a career. Female students are more likely to express a preference for a career in mathematics teaching than are male students. This imbalance is exacerbated by the relatively small proportion of females choosing to study a level of school mathematics that will serve as an adequate prerequisite to university studies in mathematics.

Students are generally not interested in teaching as a career. Teachers are perceived by many as being poorly paid with poor working conditions and low social status. Poor behaviour of students is a major concern.

Mathematics teaching as a career is generally not encouraged, either by careers advisers or parents. Indeed, some parents actively discourage teaching as a career choice.

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