Teachers’ talk: perceptions of Queensland secondary teachers about students with learning difficulties

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Abstract

This paper examines the findings of a 2004 statewide secondary teacher survey of teachers’ perceptions of adolescents with learning difficulties in their classroom and school. Students with learning difficulties were defined as “those who have short or long term difficulties in literacy, numeracy and learning how to learn [Education Queensland, 1996]. The online survey of teachers employed in state, Catholic and independent schools also canvassed views on actual levels of support and school practices which were occurring for adolescents with learning difficulties in Queensland secondary schools. The survey also included considerable demographic data which has allowed for teacher and sector profiles to be created. The results of the survey have been interpreted in two complementary ways. The qualitative data examined issues relating to school governance and its relationship with provisions made for students with learning difficulties. The quantitative data, based on Likert scale responses on attitudes towards students with learning difficulties, was subjected to analysis using the Rasch model for rating scale data [Andrich, 1988; Bond and Fox, 2001]. The results reveal interesting interactions between teacher, system variables and the Rasch scaled values.

Introduction

This paper outlines research undertaken in Queensland secondary schools in 2004. An online survey and was available to all secondary teachers teaching in Queensland. It is phase one of a research project and is exploratory in nature. This paper will outline the features of the survey, detail characteristics of the respondents, and examine Rasch scaled values for teacher attitude and knowledge of students with learning difficulties. It will also outline teacher perceptions about these students. This paper will consider how teachers’ attitudes differ and how knowledgeable teachers are about students with learning difficulties in their classes? It will also determine if any particular variables are significant in relation to attitude and knowledge as well as examining the relationship between teacher attitude and teacher knowledge. It will also discuss other factors which teachers see as being significant. This study has a number of limitations. It only sampled secondary teachers employed in Queensland schools and only included those teachers who were aware of the survey and had access to a computer with internet access. Teachers also needed sufficient computer literacy skills to be involved.

Although there has been considerable research in the primary school, the complexities of adolescence and secondary schooling demands on students with learning difficulties have received little investigation. Some studies have occurred internationally (Avramidis, Bayliss, & Burden, 2000, 2002; Wallace, Anderson, & Bartholomay, 2003; Wallace, Anderson, Bartholomay, & Hupp, 2002) and there has also been a study within a Queensland secondary school (van Kraayenoord & Farrell, 1998). Although some of these studies have studies have included students with learning difficulties, often the thrust of these studies is with the larger group of Special needs students of which this group is a part. This is particularly so when the study relates to inclusion. In this research the Education Queensland definition of learning difficulties has been used. It defines these students as those students who have short or long term difficulties in literacy, numeracy and learning how to learn (Education Queensland, 1996).
Figure 1 presents the diagram which was included on the survey instrument together with the education Queensland definition. It graphically depicts the target groups and its relationship to the rest of the class.

Features of the survey

The survey was conducted in first term, 2004 and survey remained on line for three months. It targeted secondary teachers working in mainstream classrooms in state, Catholic and independent schools.

The survey instrument consisted of 46 questions. There were 13 demographic questions including sector, gender, size of school, years of teaching experience, qualifications as well as personal experience with students with learning difficulties. The instrument presented 17 attitudinal questions to be answered on a five point Likert scale as well a question which included 20 possible characteristics of students with learning difficulties. These characteristics had been identified from the literature (Ashman & Elkins, 2002; Louden et al., 2000; Westwood, 2004). Five qualitative questions were also included which focused on school policies, school organization and factors which teachers identified as impacting on support for students with learning difficulties in their schools.

The survey was sponsored by the Queensland Independent Education Union. It was also promoted by the Queensland Teachers' Union, Association of Independent Schools in Queensland, Speld Queensland Incorporated (an advocacy group for people with specific learning disabilities), and Staff College, the unit within Education Queensland which promotes inclusive education in state schools. Schools and principals were also contacted directly by the researcher by email and fax. The survey also received widespread coverage across Queensland by mainstream media including radio, television and newspapers. The survey instrument was constructed from previously administered surveys, was evaluated by three experts in the field of learning difficulties and was piloted by 12 secondary teachers from across all sectors.

Respondents

There were 280 respondents from all areas of Queensland with the exception of high schools in Mt Isa in the north west of the state and from those north of Cooktown in the Cape York/Torres Strait Island area.
Figure 2 Sector distributions

The pie graph of figure 2 represents the participation of teachers by sector in the survey. State school teachers were 64 percent of the participants, while Catholic school teachers were 20 percent, and Independent schools made up 16 percent of the total respondents.

Analysis of the survey

The attitudinal and knowledge sections of the survey were analysed by Rasch analysis (Bond & Fox, 2001) and it is these aspects of the survey which are the basis of this paper. Rasch analysis was chosen as it provided a means of examining an individual’s response to questions and allowed it to be compared with those of other respondents. It also allows the researcher to identify which questions teachers found were the most difficult to agree with as well as allowing the appropriateness of the questions to be established.

Separate scales were created for both teacher knowledge and teacher attitude and Rasch scaled values for individual variables were also created. These were calculated by identifying teachers in the selected variables, adding their individual item estimate and calculating the average for this variable. For example, in each separate scale, the item estimate for all teachers with Master’s degrees were totaled and then divided by the number of cases. This created a Rasch scaled value for this variable. Data was analysed against the item estimate map and the qualitative data was linked to individual who had the same item estimate as the Rasch scaled value.

Teachers’ attitudes towards students with learning difficulties

The 17 knowledge questions in a five point Likert scale were analysed by the Quest program. The diagram in figure 3 shows how well teacher responses fit the model. Items that sit within the two outer lines, the railway tracks, are items that fit the model. It can be seen on figure 3 that there is only one item, item 7 which is on the outer limit of the model. The question asked of teachers was my lack of special education training hinders my ability to teach students with learning difficulties. As many respondents were learning support teacher or involved in special education and may have had some special education qualifications, this outcome is not surprising. Many principals directed the emails informing staff about the survey to learning support and special education units rather than classroom teachers.

QUEST: The Interactive Test Analysis System
**Figure 3** Do teachers' attitude responses fit the model?

The diagram that is illustrated in figure 4 represents the item fit estimate for the attitudinal questions. It shows the probability of teacher responses to items on the survey. The mean and Rasch scaled values of selected variables, including sectors, are inserted on to the diagram to allow an easier overview of how particular groups of teachers responded to particular questions and how groups of teachers compare with each other.

**QUEST: The Interactive Test Analysis System**

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<thead>
<tr>
<th>INFIT</th>
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1. item 1
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5. item 5
6. item 6
7. item 7
8. item 8
9. item 9
10. item 10
11. item 11
12. item 12
13. item 13
14. item 14
15. item 15
16. item 16
17. item 17

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The diagram illustrates the item fit estimate for the attitudinal questions. It shows the probability of teacher responses to items on the survey. The mean and Rasch scaled values of selected variables, including sectors, are inserted on the diagram to allow an easier overview of how particular groups of teachers responded to particular questions and how groups of teachers compare with each other.
On the item estimate output in figure 4 the mean is at .3 however the other variables are also clustered around the same values indicating that there is very little difference between teacher attitude across the state regardless of the variable. For example, the Catholic (C) and independent (I) sectors are also at the mean. State schools (S) are at 0.1 as are male (M) teachers. Early career teachers (ECT) that is those teaching for under one year, are at -0.2 while those teaching in very small schools (VSS) with under 150 students, are at -0.3.

Because of this consistency, the qualitative data was linked to high, medium and low Rasch scaled values. Those teachers in the high range (1.1 to 1.9 on figure 4) felt that support for LD kids is decreasing and that schools provided unqualified teacher aide support only for ascertained students. One teacher in the mid range (0 on figure 4) stated that students with learning difficulties had no option but to fail while another stated that we need appraisement, that is the process of identification used in Queensland state primary schools but not yet implemented in state secondary schools. Those teachers in the low range (-5.3 to -2.88 on figure 4) had nothing additional to say.

**Teachers’ knowledge about students with learning difficulties**
In the teacher knowledge item model, as seen in figure 5, 20 possible characteristics of students with learning difficulties were presented to teachers. Respondents were asked to tick as many or as few responses as they thought were appropriate.

Figure 5  Do teacher knowledge responses fit the model?

As illustrated in figure 5, there is only one item, item 20 which fits outside the model. This item is students with learning difficulties work well in cooperative groups. This response seems to reflect the ambivalence of secondary teachers towards group work.

In the knowledge item estimate (see figure 6), there is a much wider spread of teachers than in the attitudinal questions reflecting the greater diversity of teacher knowledge about students with learning difficulties. In this diagram, specific teacher variables are significant and these have been marked at the appropriate Rasch scaled value. Sector values have also been given as well as the mean. The item number has been replaced with the question from the survey instrument.
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<thead>
<tr>
<th>X</th>
<th>Works well in cooperative groups</th>
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<tr>
<td>X</td>
<td>Doesn’t learn from mistakes, Negative attitudes to teachers</td>
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<td>m</td>
<td>Intellectually able</td>
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<tr>
<td>I</td>
<td>Unmotivated, Can’t apply what has been taught</td>
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<td>S</td>
<td>Has ADHD</td>
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<td>Mean .6 C</td>
<td>Poor short term memory</td>
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<tr>
<td>R</td>
<td>Learnt helplessness, Disadvantaged by teaching methods</td>
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<tr>
<td>M</td>
<td>Poor achievement in key curriculum areas</td>
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<td>ECT</td>
<td>Poor organizational skills</td>
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<td>self esteem</td>
<td>Poor study skills</td>
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<td></td>
<td>Disadvantaged by assessment methods</td>
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<td></td>
<td>Easily distracted</td>
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<td></td>
<td>Behavioural difficulties, Socio/emotional problems, Low self esteem</td>
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<tr>
<td>X</td>
<td>Works well in practically based lessons</td>
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<tr>
<td>X</td>
<td>Negative attitudes towards school</td>
</tr>
<tr>
<td>X</td>
<td>Behavioural difficulties, Socio/emotional problems, Low self esteem</td>
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<tr>
<td>X</td>
<td>Poor study skills</td>
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<td>Disadvantaged by assessment methods</td>
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<td>X</td>
<td>Easily distracted</td>
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Each X represents 1 teacher

Legend: m = masters qualification
I = Independent schools
S = State schools
C = Catholic schools
R = Rural schools
M = Males
In figure 6, the mean is at 0.6. The sector distribution is fairly uniform with teachers from state schools at 0.7, those in independent schools are at 0.8 while teachers from Catholic schools are at the mean.

Significant variables were also linked with the qualitative values and it was possible to see what questions these teachers would probably agree with and also and additional insights that particular groups may have about the schools and the students with learning difficulties that they teach. Those teachers with masters degrees (1.1) are probably able to agree with most items including *have been diagnosed with ADHD, can’t apply what has been taught* and, most importantly, are the only group to recognize that these students are *intellectually able*. Their qualitative comments are also more expansive and include *I believe that each child can succeed to their potential with the right teaching strategies, styles and activities*. One teacher noted that they have the position of *Learning Support Teacher but have no formal training. Just picked it up*. Another teacher notes that there are too many students, not enough teachers and no external funding despite poor academic results.

Rural teachers (0.3) are also different and well below the mean. Rural refers to teachers who are practicing outside of major urban areas including the coastal cities of Queensland. This group agreed with the generally acknowledged characteristics as well as probably agreeing that students with learning difficulties experience learn helplessness and are disadvantaged by teaching methods. Male teachers (0.2) did not agree with this but probably agreed that *these students work well in practically based lessons*. Rural teachers also stated that funding was not enough to cope with the large number of students especially in state schools while a male teacher felt that the quiet ones are overlooked.

Those teachers in very small schools (-0.1), that is having under 150 students, probably also agree that students work well in practically based lessons. Teachers also stated that they *had never had an in-service on learning difficulties, that teachers are isolated and need time to meet* while one teacher stated that *30 percent of people in my school have learning difficulties*. Finally, Early career teachers (-0.2) that is those who have been teaching for under one year, probably agree that students have negative attitude towards school, have behavioural difficulties, have socio/emotional problems and low self esteem. They also exhibit poor study skills, are disadvantaged by assessment methods, are easily distracted, have poor achievements in key curriculum areas and have poor organizational skills. One teacher stated that there is only one remedial teacher to cater for large numbers of LD students, teach classes and do ascertainments.

The relationship between teacher attitude and teacher knowledge about students with learning difficulties

Figure 7 represents the graphic depiction of the relationship between teacher attitude and teacher knowledge. Individual item estimates were used to calculate the correlation between teacher attitude and teacher knowledge using a product moment co-efficient of correlation. The result, as seen in figure 7, is a shotgun pattern. This indicates that there is no relationship between teachers’ knowledge about students with learning difficulties and their attitude towards these same students. Teachers knowing more about the characteristics of these students does not change their attitude towards them. It would appear therefore that other factors are at work. It would seem to support the assertion in the literature, that teachers' attitudes are socially constructed (Briggs, Johnson, Shepherd, & Sedbrook, 2002; Christensen, 1996; Elkins, 2000; Fulcher, 1989; Oliver, 1984, 1996).
Figure 7 Relationship between teachers’ attitude and knowledge about students with learning difficulties.

**Teachers talk**

What seems to be the overall perception of teachers about students with learning difficulties and their views of teaching in Queensland schools? Overall there is still confusion with teachers about which group of students are the target of this research and this appears to be indicative of the wider issue of definition. The definition and the diagrammatic representation still did not elicit responses from some teachers about the group which was the target of this research. Many teachers still were concerned with ascertained students who are not the primary focus of this research. For example, some teachers spoke about bedridden students while others expressed concern about having to remove catheters. Other comments were ambiguous, for example *these students hijack learning* and the teacher who expressed fear of litigation because these students are receiving the bulk of the attention in class and the other students are being neglected.

However, despite these limitations, the qualitative comments also reveal a sense of teacher isolation, frustration, and a sense of teachers being overburdened by what they have to do.

There is also a trend that teachers seem to want experts to come in, develop programmes and strategies and to solve the problems. Teachers made little reference either to the issues of pedagogy or on professional development. Perhaps the comments and the analysis of the data is best summed up in the words of one teacher, *we talk the talk, but we don’t walk the walk.*
A further research project is currently underway which further explores the perceptions of teachers about students with learning difficulties in their classes by structured interviews. Interviews are also being undertaken with parents from Speld Queensland Incorporated and with students with learning difficulties to explore their perceptions of the experience of secondary education in different schools in each different sector, state, Catholic and independent schools.

References


Elkins, J. (2000). All empires have to fall, you just have to know where to push. *Australian Journal of Learning Disabilities, 5*(2), 4-7.


