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The school experiences of secondary students with learning difficulties: the marriage of quantitative and qualitative data

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Abstract

A survey of 280 secondary teachers about students with learning difficulties targeted teachers’ attitudes and understanding. The on line survey collected data from teachers employed in Queensland state, Catholic and independent schools. Two sets of quantitative data were subjected to analysis using the Rasch model for rating scale data (Andrich, 1988; Bond & Fox, 2001). These results were linked to demographic indicators and to qualitative data from selected teacher groups which allowed the results to be interpreted in complementary ways. Interesting interactions occurred between teacher characteristics and Rasch scaled values. A more comprehensive picture of students’ school experiences was created by further integrating qualitative data collected from 17 interviews with selected volunteer teachers, parents and students involved in the state, Catholic and independent school sectors. Teacher and parent voices reveal frustration, misunderstanding as well as dedication, determination and innovation. Student voices are, at times, inarticulate but can be both poignant and inspiring. The need for community, academic success, understanding, acceptance and justice are central to the themes raised by students.

This paper outlines a 2 phase research project which focuses on the school experiences of secondary students with learning difficulties and their families. Phase 1 and phase 2 will be discussed separately. Students with learning difficulties are defined as those with “short or long term difficulties with literacy, numeracy or learning how to learn” (Education Queensland, 1996).

Phase 1: Method

Phase 1 was an exploratory on line survey of secondary teachers employed in Queensland state, Catholic and independent schools. It explores their perceptions of students with learning difficulties and was undertaken in 2004. Rasch scaled values for selected demographic indicators related to teacher attitude and understandings of students with learning difficulties will be discussed. Study limitations include the self selection of teachers, geographic limits and technical issues including adequate computer literacy.

The survey instrument consisted of 46 questions. These included thirteen demographic questions, 17 attitudinal, using a five point Likert scale, as well as 20 statements of possible student characteristics identified by the literature (Ashman & Elkins, 2002; Louden et al., 2000; Westwood, 2004). Five qualitative questions on factors affecting student support were also included. There were 280 respondents from across Queensland including 64% of from state, 20% from Catholic and 16% from independent schools.

The attitudinal and understanding data were analysed using Rasch analysis (Andrich, 1988; Bond & Fox, 2001). Two separate scales were created. One represented teacher attitude and the other, teacher understandings about students with learning difficulties. Rasch scaled values were also created for individual demographic indicators. Scaled values were calculated by grouping the responses of teachers sharing a demographic indicator, adding together each individual person estimate for this indicator.
and then calculating the mean. This created a Rasch scaled value to represent this indicator. Estimates were then plotted on the person/item estimate map. Qualitative data was linked to individuals who had the same person estimate as the Rasch scaled value.

**Results**

**Teachers’ attitudes to students with learning difficulties**

A person/item map indicated that the mean of the teacher estimates was at 0.3 logits. The groupings by demographic indicators were also clustered around the same value indicating the uniformity of teacher attitude across the state regardless of which demographic indicator was used. While there were teachers who were well above the mean value, they were not represented by any demographic indicator explored by this research.

**Teachers’ understanding of students with learning difficulties**

In the person/item map teacher responses were again grouped according to important demographic indicators. The mean estimates for each group were calculated and plotted. The person-item map for understanding reveals a much greater spread of teacher endorsement (mean 0.6, SD 0.9) than does the attitude map. There was little difference in average teacher endorsements, regardless of which demographic indicator was invoked with teachers probably endorsing student characteristics most easily observed in the classroom.

However, from the total spread of teachers on the understanding scale, there are some individuals at -2.0 and below, unlikely to endorse any of these statements. There were also a significant number of teachers who were likely to endorse most items and showed more than a superficial knowledge of these students. Importantly, neither of these two groups of teachers were defined by any particular demographic indicator which was examined in this research.

Qualitative comments were also linked with these demographic indicators to further explore teachers’ views about these students and the factors affecting their support in schools. Themes that were common across all groups were insufficient funding, too few teachers or insufficiently trained teachers. Teachers also referred to the large number of students needing help and felt isolated and overburdened.

Person estimates were used to examine the possibility of a relationship between teacher attitude and teacher understandings using a product moment co-efficient of correlation. The result indicated that no relationship existed between teachers’ attitudes and understandings about students with learning difficulties.

**Phase 2: Method**

Phase 2 consisted of 17 structured interviews with secondary teachers, parents of students with learning difficulties and students themselves. Teachers who participated in the phase 1 were invited to participate in an interview. Parents were mainly recruited from advocacy groups involved with students with learning difficulties. Students were recruited either by teachers or parents. Participants were selected to comply with a number of indicators including fitting the definition of a student with learning difficulties, sector, or educational level to name a few. Participants were from two regions in Queensland, the far north or from the south-east of the state. Interview schedules were created from data collected in phase one and trialed with a teacher who participated in phase 1, parent of a student with learning difficulties and student. Interviews were audiotaped, transcribed, verified and analysed using NVivo.
Results

Analysis concentrated on hearing the voices of the participants and comparing and contrasting their views. As yet the analysis is incomplete, however a number of trends have appeared. Parents have much to say on a large number of subjects while teachers are less wide ranging in the issues discussed. Parents and teachers do not always have the same perception of an issue. Students can be both articulate and inarticulate but all have definite opinions about school. Parents and students always discuss the contribution of the primary school while secondary teachers never mention it.

There is also a realisation of the powerlessness of parents to effect positive changes for their children as well as parent and student disquiet and alienation. The lack of social justice students with learning difficulties and their parents is apparent. There is also a sense of teacher frustration and isolation as well as no real collaboration among any group.

The school experiences of students with learning difficulties and their parents revealed by this research project are generally most unsatisfactory causing heartache, suffering and anxiety to both groups. The position of schools and teachers can generally be summed up by one teacher in phase 1 who stated “we talk the talk but we don’t walk the walk”.

References