STUDENT PERSPECTIVES ON INCLUSIVE EDUCATION:
A SURVEY OF GRADE 3-6 CHILDREN IN RURAL ALBERTA, CANADA

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Editorial Note: As this article is written by two of the editors of the International Journal of Whole Schooling, Dr. Michael Peterson (Professor at Wayne State University and Director of the Whole Schooling Consortium) acted as editor in place of the authors. This article underwent the same rigorous double peer-review and revision process as all articles submitted to the IJWS, and the decision to publish was made independently by Dr. Peterson.
This paper, one of a series, reports the results of a survey of 413 children in Grades Three to Six on inclusive education in a school district in rural Alberta, Canada. The aims of the study were to examine the views of children regarding their experience in schools claiming to be inclusive, situated within a jurisdiction which also claims to be inclusive, and to try and identify any demographic differences in responses. The study found that the school district under examination was generally doing a good job of inclusion in the eyes of the students, and that there were little differences in this view between groups of children identified with exceptionality, and those who were not. Future areas of study include the addition of a qualitative aspect to the examination of student views.

Introduction

This paper is one of a series outlining the results of survey research conducted in the Pembina Hills Regional School Division #7 (PHRD) in Alberta, Canada (see also Loreman, Lupart, McGhie-Richmond, & Barber, 2008a; Loreman, Lupart, McGhie-Richmond, & Barber, 2008b; Loreman, McGhie-Richmond, Barber & Lupart, 2008). This survey research, conducted in November of 2007, formed part of a larger 3-year examination of inclusive education in PHRD, and involved various stakeholder groups including parents, teachers, school administrators, program assistants (sometimes known as teacher assistants), and students. The results of the surveys for each stakeholder group will be presented in subsequent papers. This paper reports the findings of the survey conducted with children in Grade Three to Six, with results for the two other groups of students (those in Grades 1 and 2, and those in Grades 7-12) being reported in other papers in this series.

Inclusive education involves schools and classrooms adapting the ways in which they work to ensure all students are educated together in common contexts, and are treated equitably (Andrews & Lupart, 2000; Loreman, 1999). Despite a considerable amount of research (especially over the past 10 years) demonstrating the efficacy of inclusive education (Loreman, 2007), and longstanding international support for the practice from bodies such as UNESCO (1994), movement towards adopting this approach universally has been slow. Alberta, Canada, is in many ways an exemplar of this, with many school districts (including the large urban districts) being slow to embrace inclusion, while others such as PHRD enthusiastically implementing inclusive practice. They see this as having positive implications for all students, consistent with recent research literature.

PHRD is a geographically large rural school district of approximately 4000 students in Alberta, Canada. A more detailed treatment of the district context can be found in Loreman et al. (2008a); however PHRD lies to the west of the major city of Edmonton, and covers an area ranging from significant urban centers of Barrhead and Westlock closer to Edmonton, across to Swan Hills in the northwest of Alberta. Primary resourced-based industries such as lumber, natural gas, oil, and
agriculture dominate the region’s economy; a region which is generally dotted with small towns and the occasional larger rural town.

PHRD has a stated commitment to inclusion, which is one of the reasons it was chosen as the jurisdiction to participate in this study. One example of this stated commitment comes from their policy manual, which acknowledges that

*The unique needs of all students must be the primary focus when providing education. All students shall be given the opportunity to have their program delivered in a regular classroom in their community school with age appropriate peers and shall be given the support required to achieve success (Pembina Hills Regional School Division #7, 2004, p. 8).*

This commitment to inclusion and subsequent policy is articulated at all levels of the district in conversations with district administration, school administration, and school teaching and support staff. It is one thing, however, to articulate a commitment to inclusive education, and quite another to actively implement practices in schools which will contribute to its success. PHRD, clearly, is also committed to ‘action’ with respect to inclusive education, and it is this commitment that motivated their participation in this study. They want to know more about how their students experience inclusion in their schools, what the district can do to improve, and what can be learned in a wider sense from their experience.

*The impact of inclusive education: Key areas of student perception.*

Inclusion, at its very broadest of terms, represents accommodating the unique learning needs of all students, regardless of their abilities. Although not without its controversies, inclusion represents in practice the ideals of social justice and equality for all students. Over the last ten years, research has demonstrated both the positive impact and concerning issues of inclusive education. When considering what inclusive education means in terms of student perception, we must consider students both with and without disabilities.

From the perspective of students with disabilities, the major benefits of inclusive education include equal access to social and academic opportunities. The benefits of such opportunities are well documented. In particular, a study by Fitch (2003) tracked students with disabilities for 6 years. Some students began their school experience and remained in segregated classrooms while others began in a segregated classroom but moved to an inclusive setting as they got older. The results are particularly striking. For students who were educated in segregated classrooms all their lives, they strongly identified with being an outsider, were embarrassed and ashamed, and wanted to escape their special setting. Often, students reported feelings of resignation as being stupid or not smart enough for regular classrooms. This study supports the findings by Hall & Strickett (2002) who also report that students with disabilities who are educated in segregated settings lack age-appropriate social interaction and have decreased levels of peer engagement. Students in inclusive classrooms, on the other hand, “constructed relatively confident hopeful sense of themselves as legitimate participants in the mainstream school culture” (Fitch, 2003, p. 237). It is important to note that inclusive classrooms here were defined as those with a culture of acceptance, and not just traditionalist classrooms within an inclusive school. Students in inclusive classrooms reported feeling like they learned more, made more friends and had higher levels of self-concept, including self-efficacy and self-esteem.
The impact of inclusive education on students without exceptionalities is also suggested to be positive, for a variety of reasons. Socially, students without exceptionalities reported higher degrees of friendship and advocacy, as well as lower degrees of abuse, towards students with disabilities in inclusive settings as opposed to special education settings (Bunch & Valeo, 2004; Nowicki & Sandieson, 2002). Academically, inclusive education has been shown to be beneficial for all students. A study by Cole, Waldron and Majd (2004) suggests that students with and without exceptionalities in inclusive classrooms have a stronger academic performance than those students in non-inclusive classrooms. This idea is supported by Demeris, Childs and Jordan (2008) who suggest that inclusive education does not have a negative impact on the achievement of students without exceptionalities and that there is even a small positive increase in their scores. Thus, the literature is clear in saying that inclusive education fosters tolerance and acceptance of difference and is academically beneficial to students without exceptionalities.

A particular issue to consider for students both with and without disabilities is that social and academic constructs are known to change over time (Butler & Marinov-Glassman, 1994; Jacobs, Lanza, Osgood, Eccles & Wigfield, 2002). In identifying relevant aspects to the success of inclusive education, it is important to consider the development period of the students in question. The objective of this study is to identify broad themes in the views of students in Grade 3-6 in the PHRD relative to inclusive education in the district, and to examine demographic variables related to these themes.

Method

Instrumentation

The Diversity, Individual Development, Differentiation survey (DIDDs) for children in Grades 3-6, developed by Lupart, Whitley, Odishaw, & McDonald (2006), was selected as the means for quantifying student views in areas relevant for overall school functioning and specific to inclusion. As noted in Lupart et al. (2006) and Loreman et. al. (2008a), the original survey covered a range of themes including school culture, safety and security, school development, student entitlement, and learning and teaching. The results of the Lupart et al. (2006) study were reviewed by a team, including researchers from that original study, and new researchers that included some of the authors of this paper. The instrument was finalized after a rigorous evaluation for clarity, and relevance of terminology and concepts by Student Services staff and teachers in PHRD. The 59-item DIDDs questionnaire, known as the ‘About Me 2’ (AM2), was based on a 5-point Likert scale of “True”, “Mostly True”, “Sometimes False/Sometimes True”, “Mostly False”, and “False”. Prior to administration, the items on the scale were ordered according to a random number chart, and included a number of ‘reverse coded’ items. When reverse coding is taken into account a high mean score on an item, factor, or the full scale indicates a positive response to the question.

Administration

In November of 2007, the survey was administered on-line to all children in Grades 4-6 who had been given parental consent to participate. Based on previous experience using the DIDDs, it was decided to administer the survey on paper and in small groups to children in Grade 3 who it was
felt might not be able to competently complete an on-line questionnaire. University research assistants were hired to conduct the administration to Grade 3 students in small groups. These assistants worked in pairs and followed standardized protocols for administration in which they were trained in the weeks leading up to data collection.

Sample

Data were returned from almost all schools in PHRD. A total of 413 students completed the survey, representing approximately 33% of all students registered in PHRD (Grades 3 to Grade 6 inclusive) at the time of survey administration. There were 17 students who were seven years old (7 male and 10 female); 99 students who were eight years old (45 male and 54 female); 108 students who were nine years old (55 male and 53 female); 95 students who were ten years old (46 male and 49 female); 81 students who were eleven years old (47 male and 34 female); and 11 students who were twelve years old (6 male and 5 female). One student indicated neither gender nor age. The numbers of survey responses were spread relatively evenly across grade levels; 128 (31%) were in Grade Three; 98 (24%) were in Grade Four; 92 (22%) were in Grade Five; and 92 (22%) were in Grade Six. Of the 413 students who completed the survey, 71 (17.2%) had a special need, according to provincial special needs funding criteria. This is in excess of the Alberta average, which generally sits at between 10%-11% of all students in any given year (Alberta Education, n.d.). Table 1 outlines how many were in each grade level, the number of boys and girls, and the number in each ‘coding’ category. One boy (code 53) did not indicate grade level, and is not included in the statistics.

Table 1

<table>
<thead>
<tr>
<th>Code</th>
<th>42: Severe emot/ or medical disab.</th>
<th>44: Severe cog. or physical disab.</th>
<th>51: Mild cog. disab.</th>
<th>53: Emotion/ or medical disab.</th>
<th>54: Learning disab.</th>
<th>56: Vis disab.</th>
<th>57: Communication disab.</th>
<th>58: Physical medical disab.</th>
<th>59: Multiple disab.</th>
<th>80: Gifted</th>
<th>Total N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gr 3</td>
<td>Male</td>
<td>16.6% 8.3% 0.0% 0.0%</td>
<td>8.3% 8.3%</td>
<td>50.0% 8.3% 0.0% 0.0%</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>10.0% 10.0% 10.0% 0.0%</td>
<td>30.0% 0.0%</td>
<td>40.0% 0.0% 0.0% 0.0%</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Av. Gr 3</td>
<td></td>
<td>13.6% 9.1% 4.5% 0.0%</td>
<td>18.2% 4.5%</td>
<td>45.5% 4.5% 0.0% 0.0%</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gr 4</td>
<td>Male</td>
<td>22.2% 0.0% 0.0% 0.0%</td>
<td>44.4% 0.0%</td>
<td>22.2% 0.0% 11.1% 0.0%</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Female 100.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 1
Av. Gr 4 30.0% 0.0% 0.0% 0.0% 20.0% 0.0% 10.0% 0.0% 10

Gr 5 Male 20.0% 13.3% 0.0% 26.7% 33.3% 0.0% 0.0% 6.7% 15
Female 16.7% 0.0% 0.0% 0.0% 66.7% 0.0% 0.0% 0.0% 6
Av. Gr 5 19.0% 9.5% 0.0% 19.0% 42.9% 0.0% 4.8% 0.0% 4.8% 21

Gr 6 Male 10.0% 0.0% 0.0% 0.0% 30.0% 0.0% 10.0% 10.0% 40.0% 10
Female 0.0% 0.0% 0.0% 14.3% 42.9% 0.0% 14.3% 0.0% 0.0% 28.6% 7
Av. Gr 6 5.9% 0.0% 0.0% 5.9% 35.3% 0.0% 5.9% 5.9% 5.9% 35.3% 17

Com. Av. al grades 15.5% 5.6% 1.4% 8.5% 32.4% 1.4% 19.7% 2.8% 2.8% 9.9% 70

Results

Data reduction

The original 59 items of the survey underwent data reduction (i.e., principal components analysis) to establish a smaller meaningful number of comprehensive items (12) that were designed to capture the nomological network associated with student perceptions based on their experience. This process is outlined in a previous paper in this series (see Loreman et al., 2008a). Through this process, a scale known as the Student Perceptions of Inclusion in Rural Canada (SPIRC) scale was developed with four factors. On the SPIRC scale for children of this age, Factor One represents school enjoyment, Factor Two represents school social climate, Factor Three measures community involvement, and Factor Four reflects the student’s expectations of school and feelings of positive self esteem relating to academic accomplishment (Loreman et al., 2008a).

Item and factor results
The mean score for the entire scale was calculated at 3.59 ($SD = 0.535$), and suggests that inclusion practices are generally being followed in the district with some success, or at least that students are responding about these inclusive approaches in a positive way on this survey. Mean scores generally resembled those of the scale as a whole for Factors One ($M = 3.55$, $SD = 1.062$) and Two ($M = 3.68$, $SD = 1.029$). The mean score for Factor Three represents a negative response to questions on this factor ($M = 2.53$, $SD = 0.924$) demonstrating a reported lack of community involvement, specifically where participating in the community with parents is concerned. A high mean score for Factor Four ($M = 4.55$, $SD = 0.598$) suggests that student’s expectations of school and feelings of positive self-esteem relating to academic accomplishment are high. Mean scores for individual items are outlined in Table 2 below, and generally reflect the scores found for each of the factors that they comprise.

Table 2

*Mean scores on items and factors as measured by the SPIRC scale.*

<table>
<thead>
<tr>
<th>Item</th>
<th>mean</th>
<th>SD</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM219: I like school very much.</td>
<td>3.75</td>
<td>1.272</td>
<td>1</td>
</tr>
<tr>
<td>AM204: School is boring (reverse coded).</td>
<td>3.60</td>
<td>1.234</td>
<td>1</td>
</tr>
<tr>
<td>AM229: I look forward to going to school in the morning.</td>
<td>3.30</td>
<td>1.336</td>
<td>1</td>
</tr>
<tr>
<td>AM214: Lots of times, I feel lonely at school (reverse coded).</td>
<td>3.62</td>
<td>1.352</td>
<td>2</td>
</tr>
<tr>
<td>AM262: I sometimes spend recess by myself because other kids don't play with me (reverse coded).</td>
<td>3.79</td>
<td>1.446</td>
<td>2</td>
</tr>
<tr>
<td>AM240: I am one of the last to be chosen for groups or teams a school (reverse coded).</td>
<td>3.64</td>
<td>1.305</td>
<td>2</td>
</tr>
<tr>
<td>AM224: My parents and I often go to museums and galleries.</td>
<td>2.10</td>
<td>1.197</td>
<td>3</td>
</tr>
<tr>
<td>AM258: My parents and I often go to see plays or musical events.</td>
<td>2.52</td>
<td>1.318</td>
<td>3</td>
</tr>
<tr>
<td>AM211: My parents and I often go to community events.</td>
<td>2.96</td>
<td>1.351</td>
<td>3</td>
</tr>
<tr>
<td>AM242: My teacher(s) expect(s) all students to do their best.</td>
<td>4.64</td>
<td>.810</td>
<td>4</td>
</tr>
<tr>
<td>AM238: A lot of things about me are good.</td>
<td>4.35</td>
<td>.883</td>
<td>4</td>
</tr>
<tr>
<td>AM218: I can do well in school if I work hard.</td>
<td>4.66</td>
<td>.775</td>
<td>4</td>
</tr>
</tbody>
</table>
Demographic differences

The analysis conducted on the demographic variables included t-tests and multiple analyses of variance (MANOVA) as appropriate. In the interests of succinctness, non-significant results are not reported. Age and grade level differences had no statistically significant bearing on the results. The significance level was set at $p < .05$, with two-tailed tests being used throughout where comparison of means was required. Where MANOVA was applied, preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity. No instances of serious violations were noted at any point in the analysis.

Gender differences

A series of independent-samples t-tests were conducted to compare the scores in each of the AM2 factors and on the total scale between boys and girls. There were significant differences between genders on the scale as a whole and on Factor One (School Enjoyment). On average boys ($M = 3.31, SD = 1.149$) reported enjoying school significantly less than girls ($M = 3.80, SD = .904; t(394) = 4.72, p < .001$). The influence of gender on the variation in responses to questions relating to School Enjoyment should be considered moderately high (5%) give the complex nature of such demographic determinants ($\eta^2 = .05$). The mean scores for boys ($M = 3.67, SD = .494$) and girls ($M = 3.52, SD = .567$) on the total scale were also significantly different ($t(342) = 2.57, p = .011$), suggesting that boys were on average more positive with respect to inclusion issues as a whole. The total scale is, however, a less informative approach to investigating gender issues in this age group of students as it only explains 2% of the total variance in responses ($\eta^2 = .02$).

Impact of exceptionality on student responses

A series of independent-samples t-tests were conducted to compare the mean scores in each of the AM2 factors and on the entire scale between children who were ‘coded’ with an exceptionality, and those who were not. There was a significant difference on Factor Two (Social Climate). The results suggest that children who were ‘coded’ as exceptional ($M = 3.41, SD = 1.236$) possessed a lower opinion of the social climate in the schools than those students who were not ‘coded’ as exceptional learners ($M = 3.74, SD = .972; t(382) = 2.082, p = .040$). The effect of differences in perceived learning ability on the social climate in schools was however very low ($\eta^2 = .01$).

Discussion

Overall, the news for the PHRD is good, with students responding in a positive manner to the SPIRC scale overall, and in very positive ways on some of the sub components. Students were relatively positive in their responses to questions about school enjoyment, showing that overall they liked going to school. A mean score of 3.55 ($SD = 1.062$) on a five-point scale suggests that a rural Canadian school district operating under a philosophy of inclusion can produce an overall school environment which is enjoyable for the children they serve.

A similar outcome exists for school social climate, although the mean of 3.68 ($SD = 1.029$) is considerably higher than for school enjoyment when the size of the data sample is taken into account, given that it is more difficult for individual responses to impact the mean in larger
samples. The school social climate is positive in this inclusive school district, demonstrating that in the rural context inclusive school districts can produce social climates which are positive for all students. Indeed, as discussed by Loreman et al (2008a), this is an essential element of producing a school district which is inclusive.

One sub-factor on the statistical scales that met with negative responses was that of community involvement. Indeed, without this component the overall mean of the scale would have been considerably higher. These results reveal that grades 3-6 students in PHRD seem to be disconnected from the sort of local community family events asked about in this survey. Given that one of these types of events is the general, “My parents and I often go to community events”, which encompasses virtually everything, this disconnect is evidently very real. Many educators might view what their students do in the community as being out of their scope of responsibility. Schools, however, can and should connect in positive ways with the community (see Elkins, 2005). Langhout (2004) found that students self-report that they enjoy school when family and community members are part of the school community as a whole. This greater level of connectedness and interdependence can be mutually beneficial to both schools and the community.

The final component relating to expectations of students and student self-esteem, was by far the highest rated component of the scale (M = 4.55, SD = .598). This success should be celebrated by PHRD because it is a crucial area for success in terms of inclusive education and learning generally (Loreman et al, 2008a). Schools in PHRD contained students with strong self-esteem, and the expectations placed on these students by the school were felt to be positive. Studies suggest that students favour school environments that provide them with opportunities for self-efficacy and social interaction (Langhout, 2004; Miserandino, 1996). That is, students flourish in environments that provide them with choice, the ability to take on leadership roles and where they have a sense of autonomy (Langhout, 2004).

The significant differences on the exceptionality variable are probably as interesting for what they did not find as for what they did. Given the general marginalized status of children with disabilities (Vlachou, 2004), there might be an expectation that they would be more negative in their responses on each subscale as well as on the scale as a whole. With the exception of a slight lower opinion of the school social climate from students with exceptionalities in Grade 3-6, this was not the case. It must be remembered, though, that although students with and without disabilities are generally positive about these issues (and other possible issues), this holds true only for the group of respondents to the survey when taken as a whole, and not necessarily for individual children in PHRD.

One interesting finding relates to gender differences, and in particular the significant finding that boys in this age group report enjoying school less than girls. This is consistent with other research in this area. In an examination of school climate, Koth, Bradshaw, and Leaf (2008) found that “Male students reported less order and discipline and lower levels of achievement motivation even after controlling for school- and classroom-level factors” (p. 101). Based on prior research, Bradshaw et al conclude that this might be the result of boys being more prone to disruptive behaviour than girls, and therefore perceiving the climate as less orderly and safe.

The four components that comprise the current reduced version of the scale outlined in Loreman, Lupart et al. (2008a), known as the SPIRC scale, have some utility in helping to determine the
extent to which inclusive practices in the district may be working. This is because these themes are assigned importance in the literature reviewed as part of that study. However, as noted, one important element is missing from the refined scale, and that relates to student views on disability and inclusion. This is a serious limitation, but one which is not possible to overcome if the analysis is to retain its integrity. Principal components analysis showed that items on the DIDDs relevant to this were simply not interpreted in unidimensional ways by students (Loreman, Lupart et al., 2008a). That being said, the four components that are retained on the SPIRC scale are helpful in trying to understand inclusion in PHRD from the student perspective.

Conclusion

As reported by student in Grades Three to Six on the 12-item SPIRC scale, the school environment in PHRD is generally conducive to promoting a sense of community and inclusion. When taken as a whole, students in PHRD felt positive about expectations teachers had of them, and on questions regarding their self-esteem. They particularly felt that their teachers want them to do their best. Students were also positive about enjoying school (although boys were less so), and in their responses on school social climate.

This study is of importance beyond PHRD. It demonstrates that a school district following an inclusion model can be effective in the eyes of its students, producing a positive environment where students have good self esteem and believe the academic expectations and standards are high, factors known to be foundational to student achievement (Loreman et al, 2008a). Secondly, this study shows that it is possible to reduce or eliminate differences between those who are identified as ‘exceptional’ and those who are not ‘exceptional’. This is evidenced by the fact that responses to this survey differed little between these two student groups; with the exception of a minor difference, they held common views with respect to the important features of their inclusive district.

Currently underway is a qualitative study in PHRD that has been connected to the survey results. This study, comprising of case studies of ten individual students with and without exceptionalities in the district, will hopefully help to enrich the survey findings and provide concrete directions for the district to reflect on as they move forward on improving their inclusive school environment.
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