Participation and Activity Limitation Survey 2006: A Profile of Education for Children with Disabilities in Canada

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. not available for any reference period
.. not available for a specific reference period
... not applicable
0 true zero or a value rounded to zero
0<sup>3</sup> value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
p preliminary
r revised
x suppressed to meet the confidentiality requirements of the Statistics Act
E use with caution
F too unreliable to be published

Contributors

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Overview

In 2006, almost half of parents reported having experienced difficulty in obtaining special education for their child regardless of the type of disability or level of severity. The activity limitations that posed the greatest challenge for accommodation included emotional, behavioural, and psychological conditions such as autism.

The majority of children with disabilities had their educational needs met to some degree. Over half of children were receiving the needed special education and among children in special classes, nearly 90% were using one or more educational aids. Still, some children had unmet needs (17.3%), either for educational aids or, more basically, for special education (24.3%).

Over 40% of children whose parents felt that they required special education were not receiving any. Students with this unmet need used educational aids to nearly the same extent as children in special education. Additionally, the majority of these students experienced more severe disabilities and had undergone professional learning assessments.

Nearly one in five children did not have the educational aids that they needed and nearly a quarter of children with unmet needs for special education had similar unmet needs regarding educational aids. The use of aids was most prevalent among children with more severe disabilities as was the level of unmet needs. However, students who did not have any educational aids, yet required some were rare.

The main reasons given by parents for unmet needs for special education were the lack of services and staff within schools. Related to this, the main reason given by parents for unmet needs for educational aids was that of a lack of funding in the school system.

Overall, children with disabilities were well accommodated across all types of education and levels of severity, but children with unmet needs for special education and educational aids faced some challenges in 2006. Although, parents felt that their children were being well-accommodated, the results vary for children with unmet needs.

Unmet needs also played an important role in the performance outcomes of students with disabilities. According to parents, modest performance shortfalls were encountered by children with unmet needs. This would be expected given that a child with an activity limitation requires the necessary classroom aids and education in order to assist them with the learning process.

In terms of participation, it was found that children receiving full-time special education experienced more limited participation compared to children in other types of education. Overall, physical activities posed the greatest difficulty for participation.

Results from the 2006 Participation Activity Limitation Survey (PALS) showed that there are many different aspects of the educational experience that can have an influence on a child with a disability. Levels of difficulty obtaining special education, the presence of met and unmet needs, level of participation and overall accommodation all play a role in determining the educational experience of the child.
Introduction

Over the past several decades, there has been significant growth in the integrated school system within Canada. Canadian public schools are legally required to ensure that all students receive free and appropriate education. This includes students with a wide variety of limitations and learning challenges. Canadian public schools educate students who, in previous generations, would have been educated in segregated settings or denied an education entirely. In many cases, children with activity limitations or disabilities can receive adapted classes and proper accommodations in a local school as opposed to having to travel great distances to attend a special school. In each province and territory there exist educational policies that define which children receive special education and how these children have their unique educational needs met by the school system. These policies vary among the provinces and territories, but throughout each runs a common thread of ensuring that appropriate services exist for children with special needs.

This release explores the educational experiences of Canadian children with activity limitations. These experiences were measured using the responses of parents to the Participation and Activity Limitation Survey (PALS), a post-censal survey that was conducted shortly after the 2001 and 2006 Census. Issues involving the prevalence of special education, difficulties obtaining special education, met and unmet educational needs, and educational outcomes will focus on findings from the most recent PALS survey.

Text box 1
An Overview of Participation Activity Limitation Survey

The Participation and Activity Limitation Survey (PALS) is a post-censal survey that collects information about persons with disabilities whose everyday activities are limited because of a health-related condition or problem. The most recent survey took place between November 2006 and February 2007. The Participation and Activity Limitation Survey 2006 (PALS) is funded by Human Resources and Social Development Canada (HRSDC).


The focus of this report is on children aged 5 to 14 who were identified by their parents as having one or more disabilities on the 2006 PALS and who were attending school in 2006. For the purpose of PALS, persons with disabilities are those who reported difficulties with daily living activities, or who indicated that a physical or mental condition, or health problem reduced the kind or amount of activities they could do. The respondents' answers to the disability questions represent their perception of the situation and are therefore subjective.

Questions regarding the child’s educational experience pertain to the 2005 and 2006 school year. It is important to note that the findings in this article are based on the perceptions of the parent(s) who responded on behalf of their child and do not represent the perceptions of all parents who have children with activity limitations. The use of "parent(s)" throughout this paper does not refer to a mother and father exclusively. It refers to whoever served as the child’s guardian during the time of data collection.

Text box 2
Changes in the Participation Activity Limitation Survey target population – 2001 to 2006

The Participation Activity Limitation Survey (PALS) target population in 2006 differed slightly from that in 2001. In order to compare the results from 2001 with those of the current PALS, a subset of the 2006 population was produced that excluded territories, persons from Aboriginal communities, and individuals living in residences for senior citizens. This allows direct comparisons between 2001 and 2006 to be made. All comparisons made between 2001 and 2006 use these adjusted data. However, where comparisons are not made between the two years, the territories are included as an agglomeration. They were combined due to issues surrounding sampling.

The 2006 PALS child questionnaire was modified to reflect changes to special education. Questions have been rephrased to be applicable to children either attending a regular or a special school.

Types of schools in Canada

On the 2006 Participation Activity Limitation Survey (PALS) child questionnaire, parents could indicate that their child attended one of three different types of schools. These included: regular schools, special schools, and regular schools offering special education classes.

Types of education in Canada

School type does not provide a clear picture of the number of children receiving special education. The fact that a student attends a regular school with special education classes on the premises does not necessarily mean that the student is attending these classes. They may be attending only regular classes. Additionally, children receiving special education in a regular school could be doing so on a part-time or full-time basis.

For the purpose of analysis, three distinct types of education were defined based on responses to the child questionnaire:

1) regular education, child did not attend any special education classes;
2) part-time special education, child attended some special education classes and some regular classes; and
3) full-time special education, child attended only special education classes

Throughout this paper, these different education types will be used to provide a profile of education in Canada for children with disabilities aged 5 to 14.

The prevalence of disability among children in Canada

In 2006, 4.6% of Canadian children between the ages of 5 and 14 had one or more disabilities, up from 2001 (table 1). A significantly higher rate of disability was reported among boys (5.7%) compared to girls (3.4%). Learning, speech, and chronic conditions were the leading types of disabilities for children in this age group.

Table 1
Disability rates for children aged 5 to 14, by sex and age group, Canada, 2001 and 2006

<table>
<thead>
<tr>
<th>Age groups</th>
<th>Child disability rates</th>
<th>Disability rates among boys</th>
<th>Disability rates among girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 to 14</td>
<td>total</td>
<td>number</td>
<td>total</td>
</tr>
<tr>
<td>5 to 9</td>
<td>70,370</td>
<td>3.7</td>
<td>73,880</td>
</tr>
<tr>
<td>10 to 14</td>
<td>84,350</td>
<td>4.2</td>
<td>99,300</td>
</tr>
</tbody>
</table>


Types of education received by children with disabilities

Over 40% of children with disabilities received some form of special education in 2006

More than 4 out of every 10, or 70,600 children with disabilities between the ages of 5 and 14 were receiving some form of special education during the 2005 and 2006 school year (table 2); this represents nearly 2% of all Canadian children in this age group. Of these estimated 70,600 children, the majority (62.4%) received part-time special education while the remainder attended special education classes full-time. Nearly a half of children receiving full-time special education (49.1%) did so at a special education school.
Children aged 15 to 18

The Participation Activity Limitation Survey (PALS) 2006 is comprised of two questionnaires, one focusing on children between the ages of 0 and 14 and another focusing on adults aged 15 and over. Due to the differing nature of these two questionnaires, adolescents between the ages of 15 and 18 cannot be compared to students under the age of 15.

The disability rate for adolescents aged between 15 and 18, in 2006, was 4.7%.

Overall, 1.7% of Canadian adolescents between the ages of 15 and 18 received some form of special education during the 2005 and 2006 school year. This represents roughly 4 out of every 10 adolescents with activity limitations in this age group, a level on par with students aged 5 to 14. Of these adolescents, 7.0% attended special education classes full-time.

In terms of the severity of disability, 31.5% of 15 to 18 year-olds who received special education during their schooling had a mild disability. This was followed by those with moderate (23.8%), severe (27.6%), and very severe (17.2%) disabilities.

---

### Table 2
Prevalence of education type among children with disabilities aged 5 to 14, by age group, Canada, 2006

<table>
<thead>
<tr>
<th>Education type</th>
<th>5 to 9</th>
<th>5 to 9</th>
<th>10 to 14</th>
<th>10 to 14</th>
<th>5 to 14</th>
<th>5 to 14</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>number</td>
<td>%</td>
<td>number</td>
<td>%</td>
<td>number</td>
<td>%</td>
</tr>
<tr>
<td>Total children with disabilities attending school¹</td>
<td>68,570</td>
<td>100.0</td>
<td>95,170</td>
<td>100.0</td>
<td>163,730</td>
<td>100.0</td>
</tr>
<tr>
<td>Regular education</td>
<td>43,590</td>
<td>63.6</td>
<td>49,170</td>
<td>51.7</td>
<td>92,760</td>
<td>56.7</td>
</tr>
<tr>
<td>Special education</td>
<td>24,850</td>
<td>36.2</td>
<td>45,760</td>
<td>48.1</td>
<td>70,600</td>
<td>43.1</td>
</tr>
<tr>
<td>Part-time special</td>
<td>16,100</td>
<td>23.5</td>
<td>27,990</td>
<td>29.4</td>
<td>44,080</td>
<td>26.9</td>
</tr>
<tr>
<td>Full-time special</td>
<td>8,750</td>
<td>12.8</td>
<td>17,770</td>
<td>18.7</td>
<td>26,520</td>
<td>16.2</td>
</tr>
<tr>
<td>Not specified</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>F</td>
<td>F</td>
</tr>
</tbody>
</table>

¹. The sum of the values for each category may not add to 100% as this table does not include respondents who gave unspecified responses for the type of school their child attended.


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Special education more common among older children

A greater proportion of children aged 10 to 14 (48.1%) participated in part-time or full-time special education compared to children aged 5 to 9 (36.2%; chart 1). Delays in identifying and diagnosing conditions requiring special education as well as the time required to make appropriate arrangements and accommodations may partly explain the lower prevalence of special education among younger children. Indeed, 61.9% of children aged 10 to 14 had received a professional assessment of their educational needs, compared to 57.0% of children aged 5 to 9.
Among the provinces, Ontario led the way with nearly half (48.7%) of all children with disabilities receiving some form of special education service during the 2005/2006 school year. The remaining provinces trailed only slightly, with the exceptions of Prince Edward Island (21.8%), Nova Scotia (35.0%), New Brunswick (29.6%), Manitoba, (31.5%) and the combined Territories (31.6%), all of which fell significantly below the overall Canadian proportion (43.1%; chart 2).

Chart 1
Type of education received for children with disabilities aged 5 to 14, by age group, 2006


Chart 2
Proportion of children with disabilities aged 5 to 14 receiving special education, by province and territories, 2006

Note: coefficient of variation of estimate between 16.6% and 33.3%.
Learning disabilities the most common condition requiring special education

Learning disabilities are not always apparent until a child begins school and these difficulties are often diagnosed within the school setting. In 2006, nearly 9 in 10 children (89.6%) with disabilities needing special education or attending a special school required special education because of a learning disability.

More than half of children with disabilities required special education because of speech or language difficulties (54.3%), developmental disabilities (53.0%), or emotional, psychological, or behavioural conditions (52.2%; chart 3). These results demonstrate that some children have more than one activity limitation that requires accommodation at school. If funding is available, the school system can provide special resources and services that may help to reduce the impact of activity limitations, such as those listed above.

Chart 3
Conditions among children with disabilities aged 5 to 14 requiring special education, 2006

Hearing disabilities were more common among children attending special schools accounting for twice the proportion of reported disabilities (5.3%) compared to children attending special classes in a regular school (2.8%). The opposite was true for learning disabilities, which accounted for nearly one third of disabilities (32.5%) in special education in the mainstream school system compared to special schools (27.6%).

The disabilities of children in full-time special education tended to be severe (32.8%) and very severe (45.4%) while the largest share of disabled children in regular classes experienced mild disabilities (44.4%). Among children receiving part-time special education, a nearly equal proportion experienced mild (27.9%), moderate (25.8%), severe (26.0%) and very severe disabilities (20.4%; chart 4).
Text box 5
Severity of disability
An index measuring the severity of the disability was constructed based on the answers to the survey questions. Points were given according to the intensity and the frequency of the activity limitations reported by the respondent. A single score was computed for each type of disability. Each score was then standardized in order to have a value between 0 and 1. The final score is the average of the scores for each type of disability.

Since the survey questions differ depending on the age of the respondent, a different scale was constructed for adults, for children under 5 and for children aged 5 to 14. Each scale was then divided into different severity levels. The scale for children aged 5 to 14 was divided into four groups (that is, mild, moderate, severe and very severe).

For more information on this scale, please refer to the Participation and Activity Limitation Survey 2006: Technical and Methodological Report (89-628-X).

Chart 4
Proportions of children with disabilities aged 5 to 14, by type of education and severity, 2006

Full-time special education more common among students in urban areas

Nearly one fifth (18.2%) of children with disabilities living in an urban setting received full-time special education compared to less than one tenth (8.2%) of children in rural areas. This is partially explained by the greater proportion of urban students attending special education schools. Additionally, students living in rural areas who require special accommodation may simply travel to special schools located in urban areas.

Note: coefficient of variation of estimate between 16.6% and 33.3%.
Met and unmet needs: Special education

Majority of parents believe that special education is necessary for their child

In 2006, almost 60% of parents of children with disabilities attending either regular or special classes at a regular school believed that their child required special education services. Not surprisingly, the majority of these children were already receiving special education.

Children of parents who believed special education was necessary were split nearly equally among the four levels of severity (chart 5). In contrast, over half (58.1%) of children whose parents thought special education was unnecessary had a mild disability.

Chart 5
Proportion of children with disabilities by need for special education and by severity of disability, 2006

One quarter of children with disabilities have an unmet need for special education

One in four children with disabilities had parents who believed that there was a need for special education was not receiving this type of schooling (chart 6). In other words, among children whose parents believed that special education was necessary for their child, over half (58.3%) were receiving this support, while the remaining 41.7% of students were not. Of these 36,590 children not receiving the necessary special education, nearly half (48.8%) had severe or very severe disabilities and almost two-thirds (63.8%) had undergone a professional assessment of their educational needs. Students in need of, but not receiving special education, may be waiting for initial detection and identification in the school system, or they may not be eligible for accommodation, or the necessary special education services may simply be unavailable.

Interestingly, a small portion of children were receiving special education even though their parents considered it to be unnecessary. They may have been following recommendations from school staff or health care professionals, but believed that their child’s needs could still be met without the aid of special education services.
Chart 6
Proportion of children with disabilities aged 5 to 14 receiving special education, by necessity of special education, 2006


Newfoundland and Labrador (11.6%), Saskatchewan (15.6%), Alberta (18.3%), and Manitoba (18.8%) had proportions of children whose parent(s) reported unmet needs for special education that were significantly below the Canada-wide average (24.3%; chart 7). Quebec had a higher proportion of children needing, but not receiving special education (34.0%) compared to the overall Canadian level.

Chart 7
Proportion of children with disabilities aged 5 to 14 with unmet needs for special education, by province and territories, 2006

Note: coefficient of variation of estimate between 16.6% and 33.3%.
Difficulty obtaining special education services

Nearly half of parents reported difficulty getting special education for their child

Among children who required special education or who attended a special school, nearly half (49.0%) had parents who reported experiencing difficulty obtaining special education services. This level was consistent across all types of education; that is, regardless of whether the child was currently enrolled in full-time (53.0%) or part-time (49.3%) special education or in regular classes (46.2%).

Parents of children with very severe disabilities were the most likely to report challenges in obtaining special education for their child (64.0%), but this proportion decreased as the severity of disability lessened from severe (54.1%) to moderate (41.8%). At the opposite end of the spectrum, less than a third of children with mild disabilities had parents who experienced difficulty obtaining these services (30.6%; chart 8).

Chart 8
Proportion of children with disabilities aged 5 to 14 who experienced difficulty obtaining special education, by severity of disability, 2006

<table>
<thead>
<tr>
<th>Severity of Disability</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild</td>
<td>35</td>
</tr>
<tr>
<td>Moderate</td>
<td>45</td>
</tr>
<tr>
<td>Severe</td>
<td>55</td>
</tr>
<tr>
<td>Very severe</td>
<td>65</td>
</tr>
</tbody>
</table>


Difficulty obtaining special education most prevalent among parents of children with emotional, psychological, or behavioural conditions

A significantly greater proportion of parents (59.4%) felt that it was difficult obtaining special education if their child had an emotional, psychological, or behavioural condition such as autism or attention-deficit hyperactivity disorder (ADHD; chart 9). These levels, however, did not significantly differ from those for hearing and vision difficulties.
A Profile of Education for Children with Disabilities in Canada

Chart 9
Proportion of children with disabilities aged 5 to 14 whose parents reported difficulty obtaining special education, by condition, 2006

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional, psychological, or behavioural conditions</td>
<td>60%</td>
</tr>
<tr>
<td>Learning disabilities</td>
<td>55%</td>
</tr>
<tr>
<td>Developmental disability or disorder</td>
<td>50%</td>
</tr>
<tr>
<td>Hearing difficulties including deafness</td>
<td>45%</td>
</tr>
<tr>
<td>Speech of langauge difficulties</td>
<td>40%</td>
</tr>
<tr>
<td>Vision difficulties including blindness</td>
<td>35%</td>
</tr>
<tr>
<td>Difficulty walking or moving around</td>
<td>30%</td>
</tr>
</tbody>
</table>

Note: coefficient of variation of estimate between 16.6% and 33.3%.

A significantly lower proportion of parents in Saskatchewan (35.4%) reported difficulty obtaining special education for their child compared to the overall Canadian average (49.0%; chart 10).

Chart 10
Proportion of children with disabilities aged 5 to 14 whose parents reported difficulty obtaining special education, by province and territories, 2006

Inadequate levels of services and staff the most common problem faced by parents

Four out of five parents (81.6%) reported experiencing difficulties related to a lack of available special education services and staff. Over half of parents (56.1%) reported problems having their child tested for special education services. A nearly equal proportion of respondents experienced difficulties either communicating with their child’s school (17.4%) or with the absence of locally available special education services (16.6%).

Met and unmet needs: educational aids

There are many different aids that enable a child to participate more fully in the school system. Structural supports such as ramps and railings can help students with disabilities negotiate their school environment and ensure that buildings are accessible. Educational supports or services that assist the child with learning and classroom participation include tutors, teacher’s aides, special software, and attendant care services. These latter types of aids are the focus of the next section. For information on types of aids used outside the educational setting by both children and adults, please refer to the Participation and Activity Limitation Survey 2006 (PALS): Assistive Aids and Devices (12-345-X).

Children who require additional educational aids, regardless of whether they currently use other aids, are considered to have unmet needs for these services or devices. At the same time, children who use aids and do not need further aids are considered to have had their needs met. Implementing strategies that would help reduce unmet needs among students with disabilities ensures that fewer of these students are without the aids necessary for learning.

Among children with disabilities, 109,240 or 67.5% used one or more educational aids in 2006. Use of these aids depended on whether the child was receiving special education and whether special education was believed to be necessary.

Educational aids more common among children receiving special education, but also play an important role in regular classes

Children who attended special education classes part-time or full-time recorded the most widespread use of aids with, in both cases, nearly 90% of students using one or more educational aids. On the contrary, roughly half of children with disabilities in regular classes reported the use of these learning tools (chart 11). On average, children receiving special education services used roughly twice as many educational aids at school than children with disabilities in regular education.
Although children in regular education were the smallest users of educational aids, this changes if the need for special education is taken into account. Among children with unmet needs for special education (therefore in regular classes), roughly three-quarters (74.6%) used one or more educational aids, and on average, had nearly as many aids as students receiving special education.

**Nearly one in five children do not have the educational aids that they need, a level unchanged since 2001**

Despite the extensive use of educational aids among children receiving special education in 2006, many did not have the aids that they required at school. More than one in five children receiving special education (21.2%) and almost 15% of children in regular classes needed one or more educational aids (table 3). The proportion of children with unmet needs for aids in regular classes increases to over a quarter (26.4%) if they also had unmet needs for special education. These levels have remained unchanged since 2001.
Table 3
Met and unmet needs for educational aids for children with disabilities aged 5 to 14, by type of education, 2005 and 2006 school year

<table>
<thead>
<tr>
<th>Type of needs</th>
<th>Regular classes</th>
<th>Part-time special education</th>
<th>Full-time special education</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>number</td>
<td>%</td>
<td>number</td>
<td>%</td>
</tr>
<tr>
<td>Total children with disabilities aged 5 to 14¹</td>
<td>92,400</td>
<td>100.0</td>
<td>43,040</td>
<td>100.0</td>
</tr>
<tr>
<td>Total children using aids</td>
<td>46,850</td>
<td>50.7</td>
<td>38,690</td>
<td>89.9</td>
</tr>
<tr>
<td>Needs met</td>
<td>36,200</td>
<td>39.2</td>
<td>28,630</td>
<td>66.5</td>
</tr>
<tr>
<td>Some needs met</td>
<td>9,090</td>
<td>9.8</td>
<td>9,370</td>
<td>21.8</td>
</tr>
<tr>
<td>Not applicable²</td>
<td>1,560</td>
<td>1.7</td>
<td>700⁤</td>
<td>1.6⁤</td>
</tr>
<tr>
<td>Total children not using aids</td>
<td>45,550</td>
<td>49.3</td>
<td>4,340</td>
<td>10.1</td>
</tr>
<tr>
<td>No needs met</td>
<td>4,140</td>
<td>4.5</td>
<td>770⁤</td>
<td>1.8⁤</td>
</tr>
<tr>
<td>No needs</td>
<td>41,000</td>
<td>44.4</td>
<td>3,500⁤</td>
<td>8.1⁤</td>
</tr>
<tr>
<td>Not applicable²</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Total children with unmet needs³</td>
<td>13,230</td>
<td>14.3</td>
<td>10,140</td>
<td>23.6</td>
</tr>
</tbody>
</table>

¹. This does not include children who were not attending school, as well as respondents who gave unspecified answers regarding type of education as well as for the need for or use of aids
². The majority did not know if additional aids were needed.
³. This is the sum of children with some needs or no needs met.

Note: coefficient of variation of estimate between 16.6% and 33.3%.

The proportion of children entirely without but needing educational aids was quite small in 2006 (3.4%). Nonetheless, this represents nearly 5,500 children in Canada who were not receiving any supports, in the form of educational aids, necessary for their full involvement in the educational system. It is interesting to note that a significantly greater proportion of children in regular education (4.5%) needed educational aids and had none, compared to children receiving part-time or full-time special education (1.9%).

Unmet needs for educational aids greatest among children with more severe disabilities

The proportion of children with unmet needs was greater among children with severe (30.7%) and very severe disabilities (35.7%) compared to those with mild disabilities (12.2%). On average, children with very severe disabilities use more than twice as many aids as children with mild and moderate disabilities and nearly 50% more than children with severe disabilities. The fact that children with more severe disabilities tend to require a greater number of aids may explain the higher rate of unmet needs for this group.
Tutors and teaching assistants account for nearly half of all educational aids in use

By far the most commonly used educational aids were tutors and teacher’s aides (table 4). Together they accounted for nearly half of all educational aids used by children with disabilities. This was followed distantly by note-takers and readers (13.7%). These aforementioned types of aids are characterized by their ability to be deployed in diverse situations. On the other hand, many educational aids can be disability-specific and may not be as widespread because of their special function and smaller number of users. Braille for those with vision limitations and interpreters for those with hearing limitations are but a few examples of the disability-specific nature of certain types of educational aids.

Table 4
Types of educational aids used and needed among children with disabilities aged 5 to 14, 2005 and 2006 school year

<table>
<thead>
<tr>
<th>Type of educational aid</th>
<th>Aids used</th>
<th>Aids needed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>number</td>
<td>%</td>
</tr>
<tr>
<td>Total</td>
<td>206,760</td>
<td>100.0</td>
</tr>
<tr>
<td>Tutors, teacher’s aides</td>
<td>94,500</td>
<td>45.7</td>
</tr>
<tr>
<td>Note-takers, readers</td>
<td>28,280</td>
<td>13.7</td>
</tr>
<tr>
<td>Sign language interpreters</td>
<td>2,900</td>
<td>1.4</td>
</tr>
<tr>
<td>Attendant care services</td>
<td>12,780</td>
<td>6.2</td>
</tr>
<tr>
<td>Amplifiers</td>
<td>8,530</td>
<td>4.1</td>
</tr>
<tr>
<td>Talking books</td>
<td>12,320</td>
<td>6.0</td>
</tr>
<tr>
<td>Magnifiers</td>
<td>3,370</td>
<td>1.6</td>
</tr>
<tr>
<td>Recording equipment</td>
<td>9,260</td>
<td>4.5</td>
</tr>
<tr>
<td>Computer with braille and speech access</td>
<td>8,140</td>
<td>3.9</td>
</tr>
<tr>
<td>Voice activated software</td>
<td>6,950</td>
<td>3.4</td>
</tr>
<tr>
<td>Other aids</td>
<td>19,730</td>
<td>9.5</td>
</tr>
</tbody>
</table>

Note: Coefficient of variation of estimate between 16.6% and 33.3%.
Nearly half of all needed aids fell into the category of 'other aid or service' (table 4). This may reflect the special nature of educational aids needed by children with disabilities. Each disability carries with it unique needs and challenges so it is not surprising that many children needed educational aids that did not fall into the prescribed categories. Items listed by parents included services such as speech therapy, but the most common ‘other’ need was for standard and special computer hardware and software. Equipment such as text-to-speech software, spellcheckers, touch-screen computers, laptops and personal computers accounted for 15% of all needed aids. If we include those who reported a need for voice activated software (6.7%) and computers with Braille or speech access (4.4%) then it becomes clear that there is significant demand for technology-based aids.

Despite the widespread use of teacher’s aides and tutors, nearly a quarter of students with disabilities reported a need for these particular classroom aids.

**Lack of funding the main reason behind absent but needed educational aids**

Three-quarters of parents (75.3%) cited a lack of funding within the school system as a reason for why their child did not receive the necessary educational aids. More than a quarter of parents (27.4%) reported that their child’s school did not feel that educational aids were necessary, illustrating an inconsistency between the two concerning the child’s needs. One in four parents gave other responses for why their children did not have the educational aids that they needed. These included lack of availability or access to educational aids and the waiting period until accommodations could be properly arranged.

**Educational outcomes of children with disabilities**

**Children with disabilities well accommodated at school**

Whether the needs of the student are being met or whether they are unmet involves such things as whether the child has access to special education and whether the proper assistive aids are available.

For each type of education, more than 85% of parents agreed that their child’s condition or health problem was being accommodated by the school. The findings are also underscored when examining the relationship between the severity of a child’s disability and the perceptions of their parents on the degree of accommodation. Overall, the majority of parents reported that their children were being suitably accommodated in all types of school settings regardless of severity. However, parents of students with severe and very severe disabilities reported, on average, slightly lower levels of accommodation than children with mild disabilities.

On average, parents of children who had unmet needs for educational aids at school felt that their child was not as well accommodated as did parents of children who had all needs met. Accordingly, nearly a third of parents of children with unmet needs did not agree that their child’s condition was being accommodated by the school system. In contrast, this opinion was held by only 7.6% of parents of children who had all needs met (chart 12).
Chart 12
Proportion of children with disabilities aged 5 to 14 with met and unmet needs for educational aids, by perception of accommodation by the school system, 2005 and 2006 school year


Children with unmet needs struggle academically

Parents were asked to rate their child’s academic performance during the 2005 and 2006 school year on a scale ranging from very well to very poorly. On average, children in special education were reported by their parents as underperforming compared to their regular education counterparts. The proportion of children in regular classes said to be doing ‘very well’ academically (31.2%) compared to children receiving special education (15.7%) contributed to this difference. Parents rated their child’s performance higher among those with the least severe disabilities, which may largely explain this difference as a much greater proportion of children in regular education have mild disabilities relative to children in special education.

A large portion of children who had unmet needs for special education performed poorly or very poorly (45.8%) compared to their classmates with disabilities who did not require special education (7.3%) and to children participating in special education (31.8%). This contributed to an average performance that was weaker than both these latter groups. A similar trend emerged among children with unmet needs for aids. This group’s mean performance was significantly weaker than children whose needs for aids had been met. Nearly twice the proportion of children with unmet needs for aids were identified by their parents as performing poorly or very poorly in school (48.6%) versus children with all their needs for educational aids met (26.0%).

A significantly greater proportion of children in special education took longer to achieve their current academic level and took fewer classes than children in regular education (chart 13). A key factor in this was the greater prevalence of more severe disabilities among children in special education.

Over half of children with unmet needs for special education (57.2%) took longer to achieve their current level and a fifth (21.8%) took fewer classes. In comparison, among children in regular classes who did not need special education, just over one tenth (11.0%) took longer to achieve their current level and a negligible proportion (6.5%) took fewer classes.
Children in full-time special education face greatest limitations for school activities

Limitations to school participation for children with disabilities were measured across four types of activities including: participation in physical education or organized games requiring physical activity, playing with others during recess or lunch hour, participation in school outings such as visits to museums, and classroom participation.

For all four activities, the parents of a greater proportion of children receiving full-time special education, including those attending special schools, viewed their child’s participation as being limited compared to children in part-time special or regular education (table 5).

Overall, students with disabilities experienced greater limitations to participation in activities that were physical in nature as opposed to academic. The nature of a disability may make participation in physical activities difficult and if the activity is not accessible, students with certain limitations may be unable to take part. The type of participation impacted the least by activity limitations was that of school trips.
Table 5
Limitations to participation for children with disabilities aged 5 to 14, by class type, 2005 and 2006 school year

<table>
<thead>
<tr>
<th>Limitation type</th>
<th>Regular education</th>
<th>Part-time special education</th>
<th>Full-time special education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>percentage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical education or during organized games</td>
<td>45.7</td>
<td>39.1</td>
<td>60.3</td>
</tr>
<tr>
<td>Playing with others during recess or lunch</td>
<td>41.7</td>
<td>43.2</td>
<td>58.0</td>
</tr>
<tr>
<td>Taking part in school outings</td>
<td>23.6</td>
<td>24.5</td>
<td>34.7</td>
</tr>
<tr>
<td>Classroom participation</td>
<td>28.9</td>
<td>39.9</td>
<td>51.1</td>
</tr>
</tbody>
</table>


Children with hearing disabilities the least limited in their classroom participation

Those with a hearing disability were the least limited in terms of classroom participation (30.7%) whereas students with mobility-related disabilities were more limited in terms of participation in physical education and organized games (82.1%), playing with others (69.1%) and school outings (51.4%) than children with any other type of disability (table 6).

Table 6
Limitations to participation for children with disabilities aged 5 to 14, by disability, 2006

<table>
<thead>
<tr>
<th>Limitation type</th>
<th>Physical education</th>
<th>Playing with others</th>
<th>School outings</th>
<th>Classroom participation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>percentage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hearing</td>
<td>44.4</td>
<td>45.2</td>
<td>25.1</td>
<td>30.7</td>
</tr>
<tr>
<td>Seeing</td>
<td>55.8</td>
<td>52.7</td>
<td>29.1</td>
<td>44.9</td>
</tr>
<tr>
<td>Communication</td>
<td>50.2</td>
<td>58.2</td>
<td>31.2</td>
<td>50.7</td>
</tr>
<tr>
<td>Mobility</td>
<td>82.1</td>
<td>69.1</td>
<td>51.4</td>
<td>42.2</td>
</tr>
<tr>
<td>Agility</td>
<td>65.6</td>
<td>64.8</td>
<td>38.6</td>
<td>48.3</td>
</tr>
<tr>
<td>Learning</td>
<td>43.5</td>
<td>47.1</td>
<td>26.4</td>
<td>42.1</td>
</tr>
<tr>
<td>Chronic</td>
<td>59.1</td>
<td>55.4</td>
<td>32.3</td>
<td>41.0</td>
</tr>
<tr>
<td>Developmental</td>
<td>58.4</td>
<td>65.6</td>
<td>36.7</td>
<td>58.2</td>
</tr>
<tr>
<td>Psychological</td>
<td>53.3</td>
<td>63.6</td>
<td>36.4</td>
<td>55.2</td>
</tr>
<tr>
<td>Other</td>
<td>26.1&lt;sup&gt;E&lt;/sup&gt;</td>
<td>15.3&lt;sup&gt;E&lt;/sup&gt;</td>
<td>F</td>
<td>F</td>
</tr>
</tbody>
</table>

Note: coefficient of variation of estimate between 16.6% and 33.3%.
Glossary of main terms and concepts

Disability

For the purpose of Participation Activity Limitation Survey (PALS), persons with disabilities are those who reported difficulties with daily living activities, or who indicated that a physical or mental condition, or health problem reduced the kind or amount of activities they could do. The respondents’ answers to the disability questions represent their perception of the situation and are therefore subjective.

Integrated school system

Formal education system that includes both children with and without disabilities.

Met and unmet needs for educational aids

If a child uses aids and does not need any additional aids then he or she is considered to have his or her needs met for education aids. Conversely, if a child uses aids, but needs additional aids or does not use any aids, but needs aids then the child is considered to have unmet needs for educational aids.

Met and unmet needs for special education

When a parent reports that special education is necessary for their child and that their child is receiving this type of education then the child is considered to have his or her needs met for special education. Conversely, if a parent reports that special education is necessary for their child, but that their child is not receiving this type of education then the child is considered to have unmet needs for special education.

Rural area

Rural areas are the complement to urban areas and include what is not already covered by the latter.

Significant differences

When comparing two estimates, one must determine if the difference between them is statistically significant before any conclusions are drawn. Since there is a sampling error associated to each estimate, it is possible that although two estimates seem to be different, their associated errors are so high that one cannot affirm that they are in fact different. Before one can conclude that the difference is not due to random sampling error, a decision needs to be made on how unlikely the chances are of obtaining such a difference by chance.

This can be determined by creating confidence intervals for the estimates using each ones coefficient of variance (CV). If the confidence intervals overlap then the estimates are not significantly different.

Special education

For the purposes of this paper, special education refers to education modified to accommodate the educational needs of children with a disability.

Urban area

Urban areas have total populations of at least 1,000 with a population density of no fewer than 400 persons per square kilometre.