

Supporting kindergarten children to be successful learners

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Kindergarten is a time of exploration and learning. Children can enjoy imaginative play during centre time, listen to exciting tales during story-time, make new creations during craft time, and talk with classmates during snack time. Kindergarten also provides many children with their first exposure to a structured learning environment. This time of learning offers children the opportunity to develop

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their language, social, motor, and cognitive skills (Alberta Education, 2006). However, for some children their first exposure to school may not be positive. They may lack the language skills to share their ideas, have difficulty following instructions, struggle with holding a pencil, or feel clumsy during games at recess.

These children may feel frustrated, have difficulty interacting with peers, and struggle to participate in the daily classroom routine. Unfortunately, not all children with special education needs have been identified prior to entering kindergarten. For these children, the early identification of their learning difficulties is important (Alberta Education, 2006).



Therapy services are typically offered to children struggling within the school environment as a responsive measure to help remediate skills or compensate for decreased ability. By the time children are referred for therapy services they may have already experienced failure and frustration as learners. It doesn't have to be

this way! A group of professionals at Renfrew Educational Services' Community Services program have found that children with learning difficulties can be

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successfully identified at the very beginning of their school career. The screening program, funded by the Calgary Catholic School District, has been successful in identifying children who qualify for additional support to optimize their learning. Some of these children, who have not been identified prior to entering the school setting, have one or more areas of difficulty in the moderate to severe range.

This article describes the experience of those involved in Renfrew Educational Services' Community Services program in providing a unique multidisciplinary screening program for kindergarten children, while providing specific details about the occupational therapy component.

What is screening?

Screening is described by Peach (1992) as a brief, low-cost, systematic evaluation of skills and abilities associated with successful learning in school. Information about screening measures focusing on a child's global functioning within the classroom is very limited. For example, the Denver Developmental Screening Test (Frankenburg & Dodds, 1967) is a school entry screening measure administered by public health nurses. Unfortunately Cadman and colleagues (1984) found it to be an inefficient way to predict which children would have difficulty functioning in the kindergarten environment. Another example is the ABLE screening test for pre-kindergarten children which was developed to predict concerns about children's school adjustment and their subsequent need for support (Barbarin, 2007). It does not, however, measure actual student performance within the classroom.

When looking at discipline specific school-based screening for children, several speech and language screening measures are described (Nelson, Nygren, Walker, & Panoscha, 2006; Tomblin et al., 1997). In the occupational therapy literature, Ahn, Miller, Milberger,

and McIntosh (2004) describe a screening process where parents were surveyed with the Short Sensory Profile (McIntosh, Miller & Shyu, 1999) to estimate the prevalence of sensory processing disorders within the kindergarten population. This screening process was not used to determine which children required further assessment, or if they required occupational therapy services. No specific physical therapy kindergarten screening tools have been described in the literature. In summary, no multi-disciplinary screening methods addressing a child's functional skills within the kindergarten classroom were found in the literature.

What is the Renfrew Educational Services' Community Services program?

Over the past eight years, Renfrew Educational Services' Community Services program has been providing multi-disciplinary kindergarten screening for the Calgary Catholic School District (CCSD). Our partnership with the CCSD has three objectives:

1. Early identification of children in kindergarten who may have special education needs through screening and assessment,
2. Provision of rehabilitative services to meet those needs,
3. Building teacher capacity and knowledge in those areas.

Every child enrolled in kindergarten within the CCSD is screened at the beginning of the year by a team of occupational therapists, speech-language pathologists and therapy assistants. In the 2007-2008 school year all 81 schools (approximately 2900 children) within the CCSD participated. To begin this process, a screening schedule is arranged with each school. Next, an information package outlining the process,

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along with details of therapy activities, is provided to each teacher. Teachers inform parents/guardians to ensure that they are aware and consent to their child's participation. Parents/guardians are also made aware that their child's participation in the screening process is voluntary. During screening, children (whose ages range from 4.4 to 5.7 years) rotate through activities in small groups, within or outside the classroom setting. Children complete a specific craft activity with the occupational therapy team, and conversational speech and language activities with the speech language

pathology team. Although physical therapists are not present at every screening, they are available to provide individual screenings of a child's gross motor skills, at the request of the teacher, occupational therapist, or speech-language pathologist.

The occupational therapy screening activity requires children to cut, glue, draw pre-printing shapes, colour,

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and print their name. Along with fine motor skills, organizational and attention skills are observed. For example, therapists note how a child is able to organize supplies and follow the instructions for a multi-step activity. Finally, therapists discuss any concerns regarding a child's sensory, self-care, and social skills with the teacher.

Following the screening activities, the therapists and therapy assistants meet with the teacher to discuss their observations. As a team, they collaborate to determine which children would benefit from standardized assessments. Therapists describe to the teacher how a child performed in the screening activities and compare that performance to what is expected for a child of that specific developmental age. Children are identified as having "no concerns", "requiring formal assessment", or "needing to be monitored". Including the teacher in the decision-making process is essential, as they know the children best within the kindergarten setting. We need to ensure that the children's abilities and behaviours observed during the screening activity accurately reflect their daily performance. All children who participate in the screening activity are given a letter from the therapy team to take home to their parents/guardians. This letter indicates that the child has participated in the screening activity that day, and identifies if there are "no concerns", if the child requires formal assessment, or if the child's skills will be monitored.

Children identified as those who would benefit from monitoring are typically children the teacher identifies as having the potential for natural skill improvement. For example, if a teacher feels that a child's skills will simply improve with more exposure to an activity, the child is monitored over the next few months. This often includes children who have not had the opportunity, or interest, to participate in structured activities with their peers prior to entering kindergarten. At this point, strategies may be provided to the teacher to help develop the child's skills during existing programming.

A child is recommended for a formal occupational therapy assessment if the child's skills do not improve as a result of classroom participation over the first few months.

Children identified through screening are then formally assessed

All of the kindergarten children within the CCSD were screened between mid-September and mid-October; formal assessments were completed between mid-October and mid-January.

Based on the screening results in 2007-2008, a total of 1258 (43%) students were identified as requiring an assessment by one or more therapy disciplines. This included 669 (23%) students assessed by occupational therapists. Formal parental/guardian consent is required for those children requiring individual assessment.

Several standardized occupational therapy assessments are used based upon the area(s) of concern identified during screening. Following the assessments, therapists provide a report to the school board. The school board then determines if children qualify for an educational learning code based upon therapy assessment scores and the report from therapist(s). Students who qualify for special education programming are

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provided with a special education code for the purpose of reporting data to Alberta Education (Alberta Education, 2008). Kindergarten Consultants and the Alberta Ministry of Education make the final decision to determine if a child will receive therapy services. Children identified as needing support are coded at one of two levels: Mild-Moderate (MM) or Program Unit Funding (PUF).

Following coding, children receive therapy services both within and outside the classroom environment. In the 2007-2008 school year, only 223 (18%) of the students assessed by one or more therapy disciplines were determined to have “no code” meaning that they did not qualify for intervention services. Therefore, 82% of the 1258 students who were identified in the screening process were deemed eligible for therapy intervention. Specific to occupational therapy, 100 (15%) students were determined to have “no code” and 569 (85%) students assessed by an occupational therapist were eligible for occupational therapy intervention.

PUF students, who may have severe speech and lan-

guage needs, or moderate needs in more than one area such as speech and language along with occupational therapy or physical therapy areas of learning, are sometimes identified prior to entering kindergarten.

In 2007-2008 there were a total of 132 PUF kindergarten students in the CCSD. Eighty-seven (66%) of these 132 PUF students were identified through our screening program; the remaining 34% had been identified prior to starting kindergarten. The successful identification of these children allowed the school board to put supports in place as soon as possible. These supports may include a teaching assistant within the classroom to provide daily one-to-one support and regular therapy in the form of direct student treatment, teacher consultation, and parent workshops.

Therapy intervention following assessment

Following screening and assessment, we provide rehabilitative services for kindergarten children who have been identified with mild, moderate, or severe delays. Our occupational therapists provide classroom-based, small group, and one-to-one treatment sessions based on student need. Intervention is focused on assisting the children in meeting their educational goals as outlined in their Individualized Program Plan (IPP). Intervention sessions often involve multi-step craft activities and games which provide children the opportunity to practice their fine motor, organizational, and attention skills. Strategies and suggestions are also provided to the teacher to encourage carry-over of skills into the classroom setting, and to build teacher capacity and knowledge to further help the children with these skills. In year-end surveys teachers have commented that they consistently observe several changes in the children. The children have improved skills, increased confidence, and increased self-awareness. They also demonstrate increased classroom participation and peer interaction following therapy treatment.

The Renfrew Educational Services' Community Services program partnership with the CCSD has been very positive. The early identification of kindergarten children requiring therapy services through the unique multidisciplinary screening program has enabled children to receive the support they require to be successful learners.

It is hoped that by sharing this information with our colleagues, other kindergarten children may benefit from early identification of therapy needs as well.

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