Making Children's Voices Visible
The School Setting Interview (SSI)

Professor Helena Hemmingsson
PhD, Reg. OT. Department of Welfare and Society Studies, Linköping University, Sweden
Merrolee Penman
MA(Educ), Dip Teach Tert, NZROT. School of Occupational Therapy, Otago Polytechnic, Dunedin

ABSTRACT

Children and young people with disabilities educated in their local school may need services to get equal access to the curriculum. To ensure that any educationally-relevant services achieve the best outcomes, the students' own voices and perspectives should also be included. This paper introduces the School Setting Interview (SSI), an interview-based assessment that helps occupational therapists to understand the barriers to, and facilitators of, inclusion from the student's perspective. This information added to that identified by the teaching team and the parents/caregivers, can only lead to a "fuller picture" which all the team can draw from when determining issues and identifying potential strategies to address.

Practice Paper

Key Words: *Children-centered assessment, children's perspective, disabled children, school participation.*

Making Children's Voices Visible: The School Setting Interview (SSI): An assessment to enhance school participation of students with disabilities
Occupational therapists in educational settings have an important role to enhance school participation of students with disabilities. When developing and providing educationally relevant therapy services in schools it is vital to ensure that the children's own voices and perspectives are taken into account. This paper presents the School Setting Interview (SSI), (Hemmingsson, Egilson, Hoffman & Kielhofner, 2005) an interview-based assessment that helps therapists include children's own perspective on the barriers and facilitators to the inclusion in the school.

According to international agreements in most Western societies, children with disabilities should be educated in their local mainstream schools along with their peers (Ministry of Disability Issues, 2001; UNESCO, 1994; UNESCO, 2000). This policy came about with support from the movement towards equality for all, as people with disabilities advocated for their governments to create laws and allocate resources to make this happen. The New Zealand Disability Strategy is an example of an outcome of this advocacy (Ministry of Disability Issues,

2001) which includes objectives focused on providing the best education for disabled people and ensuring that disabled children and youth lead full and active lives.

At first many teachers and health professionals greeted this change towards inclusion with some anxiety. Peoples' concerns were often related to the risk of children with disabilities being bullied and left without friends, as well as a belief that regular schoolteachers lacked expertise in meeting the learning needs of the children. Many believed small classes specifically for children with disabilities would address these issues better and therefore be more beneficial for the child. However, academically, teaching in small homogenous groups has failed to show its effectiveness, and with respect to children's development and satisfaction with school, current research supports inclusion (Dickinson et.al., 2007; Grue & Heiberg, 2000; Hegarty, 1993).

Nevertheless in general, schools and the school curriculum are still planned and organised for children without disabilities who are physically independent and have age-appropriate cognitive and social skills. Consequently, many students with disabilities do experience environmental barriers to educational activities and socialisation in school that their peers do not have to struggle with (Hemmingsson, 2002). This in turn can influence these students' abilities to both access the curriculum and to be active and valued members of the school community.

Students' perspective
When discussing issues that influence the student's ability to be an active member of their school community, it is important to include that student's voice and perspectives. Occupational therapists working in a collaborative consultative model (Hasselbusch & Penman, 2008) in schools often focus on supporting teachers in their work. Listening to the parents and their concerns are also emphasised in family-centered models according to the ideas that needs shall be identified by those who know the child best. However, in order for the team to develop appreciated, effective and well-targeted solutions, it is not only essential but vital to include the child and their perspective (Conventions on the Right of the Child, 1990. If a solution is designed without the child

or young person's involvement, it might fail or not be as effective as intended by parents, teachers or therapists. Children with disabilities often have important insights and suggestions about the services that they are offered (Sturgess, Rodger & Ozanne, 2002; Tam, Teachman & Wright, 2008). Moreover, the opportunity to make choices, express preferences, set goals and self-regulate learning and behaviour have all been linked to more favourable educational and adult outcomes (Wehmeyer & Schalock, 2001). Thus, collaborative consultation should include children's own perspective for services to be effective and provide students with disabilities equal access to educational experiences. The School Setting Interview (SSI) is an assessment that assists the therapist to identify the issues from the perspective of the student with disabilities (Hemmingsson, Egilson, Hoffman & Kielhofner, 2005).

The development of SSI
Influenced by the disability rights movements (Swain, Finkelstein, French & Oliver, 1993) and the Convention on the Right of the Child (1990) Hemmingsson, in Sweden, initiated the development of the SSI in the middle of 1990s. At this time, paediatric occupational therapy assessments typically only addressed body-functions or the most basic daily actions of activities such as eating, dressing and toileting (Fisher & Short-Degraff, 1993; Law, 1991; et. al.). Furthermore, most existing assessments were developed for younger children attending preschool or primary school, and were not always suitable for older school aged children. Overall, occupational therapy assessments using a client-centred approach with respect to children with disabilities were lacking. For these reasons, the goal of developing the SSI was to create a client-centred interview assessment that addressed how physical and psychosocial environmental factors influenced participation in school, from the perspective of students with disabilities aged 9-19 years. Thus, the main issue was that the students themselves had a voice with respect to their schooling, services and how to enhance their participation.

The current SSI version 3 (Hemmingsson, Egilson, Hoffman & Kielhofner, 2005) is published in both Swedish and English by the Swedish Association for Occupational Therapists. It has been developed and tested (Egilson, 2005; Hemmingsson & Borell, 1996; Hemmingsson, Kottorp & Bernspång, 2004) and is used in clinical practice and research in Europe as well as in other parts of the world.

THE SCHOOL SETTING INTERVIEW

Key characteristics of SSI
The SSI was designed in accordance with the Model of Human Occupation conceptualisation of the environment, (Kielhofner, 2002), and concepts of client-centered practice (Canadian Association of Occupational

Therapists, 2002; Law, Baptiste & Mills, 1995). The SSI focuses on barriers and facilitators in the school environment as opposed to the student's limitations or diagnosis. The questions in the SSI are framed in neutral language to avoid problematising the child's functioning. The SSI asks the student how they perceive that they manage school activities and what social and physical adjustments they think might be needed in order to enable their participation.

Applicability
The SSI was developed specifically for students aged 9 years and upwards who have some type of motor dysfunction. However, it has also been found to be very suitable for students with psychosocial difficulties such as Attention Deficit Hyperactivity Disorder (Hauksdóttir & Júliusdóttir, 2007; Volk, 1998). One of the key reasons why the SSI is applicable to a range of children is the nature of the items (i.e. questions) that concerns everyday school activities all students take part in whether or not they have a disability. Although relevant for most children and young people, the student must have sufficient skills to communicate what they are experiencing. In the SSI the student's active participation in the assessment process is a prerequisite for scoring as well as the planning of environmental adjustments. However, the SSI has been used with students with speech and language issues, with the student using their assistive communication devices rather than voice, although the time for the interview may increase considerably which could impact on therapist's workloads.

Items and scoring
The SSI contains 16 items (see Table 1) with suggested follow-up questions providing the therapist with information about the student's functioning and need for adjustments within school. For each item, the therapist asks:
- How do you act /manage now in your class when you are going to (item)? Have any adjustments been made? If so, what type? Are you satisfied with the present situation? What adjustments would make school easier for you?

The general questions and the follow-up questions are formulated in simple language in order to ensure that they are easily understood by students of any age. Exactly how they are formulated and the number of follow-up questions may depend on the age of the student. It is essential the student understand the intent of the questions, as well as the therapist understanding the area of concern that the student wants to address.

After discussion with the student the following four-step rating scale regarding levels of student-environment fit is used for each item, with higher numbers indicating a higher level of match:

- A score of 4 denotes a 'Perfect fit' (no need for adjustments), a score of 3 equals a 'Good fit' (have adjustments and are satisfied), the rating of 2 indicates a 'Partial fit' (have some adjustments but needs some more) and a score of 1 denotes 'Unfit', when the student perceives that the school environment needs to be modified but no adjustments have been made.

1.	Write	*Taking notes, writing reports.*
2.	Read	*Reading from the board, turning pages.*
3.	Speak	*Participate in group work, speaks in front of group.*
4.	Remembering things	*Daily schedule, homework.*
5.	Do mathematics	*Writing numbers and formulas, using calculator and computer.*
6.	Do homework	*Location for homework? Need for personal/ technical assistance?*
7.	Take exams	*Need for more time, assistance or special equipment.*
8.	Do sport activities	*Dressing and undressing, P.E. days.*
9.	Do practical subjects	*Using tools and material needed.*
10.	Participate in the classroom	*Access to objects and school supplies.*
11.	Participate in social activities during breaks	*Interacting with friends, using play equipment.*
12.	Participate in practical activities during break	*Transferring within school, toileting, eating and drinking.*
13.	Go on field trips	*Joining the classmates, need for assistance.*
14.	Get assistance	*Availability and timing for assistance.*
15.	Access the school	*Getting in and out of school, library, cafeteria.*
16.	Interact with staff	*Teachers, therapists and other 0 adults.*

Table 1: School Setting Interview (SSI) items and examples of follow up questions for each item

The student-environment fit is operationalised as the level of the students' needs for adjustments in school. In SSI "needs" refers to the student's experience of what social and physical environmental adjustments he or she perceives are needed to enable participation.

Collaborative planning
As already mentioned, the SSI assessment can be used to enable the student's participation in school by using a collaborative approach to problem identification and solution finding. To enable better access to the curriculum, the SSI, in addition to the items and scoring, also provides a methodology for collaborative planning in order to adjust target school activities. This is a specifically important step in line with the client centred philosophy where the student is involved in the planning, thus having the opportunity to influence those instrumental in supporting their inclusion into the school environment.

The use of the SSI in research projects
The SSI has been used in several research studies regarding the student-environment fit of students with physical disabilities (Egilson, 2005; Hemmingsson & Borell, 2000, 2002). In line with international research (Coupley & Ziviani, 2004; Egilson, 2005; Schenker, Coster, & Parus, 2005, 2006) the results highlight that although physical environments might be satisfactory, students still felt excluded from classroom activities and interactions in the playground. Thus, more so than physical inaccessibility, the organisation of school activities and how they should be carried out to enable the student's participation were found to be major barriers to participation. A recent study compared the student-environment fit of students with motor impairments and psycho-social limitations in Iceland (Egilson & Hemmingsson, 2009). The results demonstrated that students with psycho-social limitations had needs for participatory arrangements in school, which were overlooked, and suggested them to be a priority for occupational therapy services.

The SSI has also been used as an interview guide (Prellwitz & Tamm, 2002) or as a complement to focus groups interviews (Asbjörnslett & Hemmingsson, 2008) in qualitative studies of how students with physical disabilities perceive their school environment. Results of these international studies emphasise the social consequences of environmental barriers such as exclusion from some of the activities in school although students strive to participate in all activities and to be "just like the others". This striving to be "like the others" was also a key theme that emerged from Ford's (2009) single site case study of a New Zealand child with very high needs attending his local school where all involved saw this child as being "a kid who is like the other kids", who belongs and who contributes to his class and school. (p. 164).

Concluding remarks
In order to enable children and young people with disabilities to attend their local school, to be a valued part of their school community and to access the curriculum, their voices have to be given credibility. Helping the student to articulate their opinions about the school environment and how well they are included in this environment is also an important factor in health promotion. It is a risk children may feel dependent, insignificant and powerless when adults define the problems and outline the methods for addressing these issues (deWinter, Baerveldt & Kooistra, 1999). Involving children and young people with disabilities in the

decision-making process in matters that influence their everyday lives, prepares them for active participation in society. The SSI is an assessment that enables children's participation in decisions that concern their every-day participation in school. With their input, their needs can be more accurately identified, and potential solutions to the identified issues impacting on their inclusiveness can be identified and discussed. Using the SSI can allow the student's voice to become visible for other team members. Thus, the SSI helps the team to provide services tailored to their needs and preferences of the child that in turn will enhance school participation.

REFERENCES

Asbjörnslett, M., Hemmingsson, H. (2008). Participation at school – experienced by teenagers with physical disabilities. *Scandinavian Journal of Occupational Therapy, 15*, 153-161.

Canadian Association of Occupational Therapists. (2002). *Enabling occupation: An occupational therapy perspective.* Ottawa, ON: CAOT Publications.

Conventions on the Rights of the Child. (1990). Retrieved April 8, 2010 from http://www2.ohchr.org/english/law/crc.htm

Coupley, J., & Ziviani, J. (2004). Barriers to the use of assistive technology for children with multiple disabilites. *Occupational Therapy International, 11*, 229-243.

deWinter, M., Baerveldt, C., & Kooistra, J. (1999). Enabling children: participation as a new perspective on child-health promotion. *Child: Care, Health and Development, 25*, 15-25.

Dickinson, H. O., Parkinson, K. N., Ravens-Sieberer, U., Schirripa, G., Thyen, U., Arnaud, C., Beckung, E., Fauconnier, J., McManus, V., Michelsen, S., Parkes, & J., Colver, A. F. (2007). Self-reported quality of life of 8–12-year-old children with cerebral palsy: A cross-sectional European study. *Lancet 369*, 2171-78.

Egilson, S.T. (2005). *School participation: Icelandic students with physical impairments.* Unpublished PhD dissertation. Reykjavík: University of Iceland.

Egilson, S., & Hemmingsson, H. (2009). School participation of pupils with physical and psychosocial limitations: A comparison. *British Journal of Occupational Therapy, 721*, 44-152.

Fisher, A., & Short-Degraff, M. (1993). Improving functional assessment in occupational therapy. *American Journal of Occupational Therapy, 47*, 199-201.

Ford, J. (2009). *Not too disabled for the local school. A single site case study to explore successful local schooling for a child with very high needs.* Unpublished Masters thesis. Otago Polytechnic.

Grue, L. & Heiberg, A. (2000). Do disabled adolescents view themselves differently from other young people? *Scandinavian Journal of Disability Research, 2*, 39-57.

Hasselbusch, A., & Penman, M. (2008) Working together. An occupational therapy perspective on collaborative consultation. *Kairaranga, 9*(1), 24-31.

Hauksdóttir, D., & Júlíusdóttir, F. (2007). *Nemendur með erfiðleika af sálfélagslegum toga og skólaumhverfið* [Students with psychosocial problems and the school environment]. Unpublished BS thesis. Akureyri: University of Akureyri.

Hegarty, S. (1993). Reviewing the literature on integration. *European Journal of Special Needs Education, 3*, 194-200.

Hemmingsson, H. (2002). *Student environment fit for students with physical disabilities.* Doctoral thesis. Stockholm: University press.

Hemmingsson, H., & Borell, L. (1996). The development of an assessment of adjustment needs in the school setting for use with physically disabled students. *Scandinavian Journal of Occupational Therapy, 3*, 156-62.

Hemmingsson, H., & Borell, L. (2000). Accommodation needs and student-environment fit in upper secondary school for students with severe physical disabilities. *Canadian Journal of Occupational Therapy, 67*, 162-73.

Hemmingsson, H., & Borell, L. (2002). Environmental barriers in mainstream schools. *Child: Care Health and Development, 28*, 57-63.

Hemmingsson, H., Egilson, S.T, Hoffman. O., & Kielhofner, G. (2005). *The school setting interview (SSI)*. 3.0 ed. Nacka: Swedish Association of Occupational Therapists.

Hemmingsson, H., Kottorp, A., & Bernspång, B. (2004). Validity of the school setting interview: An assessment of the student-environment fit. *Scandinavian Journal of Occupational Therapy, 11*, 171-78.

Kielhofner, G. (2002). *A model of human occupation: Theory and application.* 3rd ed. Baltimore, MD: Lippincott.

Law, M. (1991). Muriel Driver lecture. The environment: A focus for occupational therapy. *Canadian Journal of Occupational Therapy, 58*, 171-180.

Law, M., & Baptiste, J.S., & Mills, J. (1995). Client-centred practice: What does it mean and does it make a difference? *Canadian Journal of Occupational Therapy, 62*, 250-257.

Letts, L., Law, M., Rigby, P., Cooper, B., Stewart, D., & Strong, S. (1994). Person-environment assessment in occupational therapy. *American Jouranl of Occupational Therapy, 48*, 608-618.

Ministry of Disability Issues (2001). The New Zealand Disability Strategy. Making a world of difference. Retrieved April 8, 2010 from http://www.odi.govt.nz

Prellwitz, M., & Tamm, M. (2000). How children with restricted mobility perceive their school environment. *Scandinavian Journal of Occupational Therapy, 7*, 165-73.

Schenker, R., Coster, W., & Parush, S. (2005). Participation and activity performance of students with cerebral palsy within the school environment. *Disability and Rehabilitation, 27,* 539-52.

Schnker, R., Coster, W., & Parush, S. (2006). Personal assistance, adaptations and participation in students with cerebral palsy mainstreamed in elementary schools. *Disability and Rehabilitation, 28,* 1061-69.

Sturgess, J., Rodger, S., & Ozanne, A. (2002). A review of the use of self-report assessment with young children. *British Journal of Occupational Therapy, 65,* 8-16.

Swain, J., Finkelstein, V., French, S., & Oliver, M. (1993). Disabling barriers – enabling environments. London: Sage publications.

Tam, C., Teachman, G., & Wright, V. (2008). Pediatric application of individualised client-centred outcome measures: a literature review. *British Journal of Occupational Therapy, 71,* 286-96.

Volk, G. (1998). *Arbetsterapeutisk bedömning av skolmiljön. En enkätstudie om användbarheten av Bedömning av Anpassningar i Skolmiljön (BAS) för elever med neuropsykiatriska syndrom* [Occupational therapy assessment of the school environment. A survey regarding the applicability of the School Setting Interview for students with neuropsychiatric syndromes]. BS thesis. Stockholm: Karolinska Institutet.

Wehmeyer, M.L., & Schalock, R.L. (2001). Self-determination and quality of life: Implications for special education services and supports. *Focus on Exceptional Children, 33,* 1-16.

UNESCO. (1994). *The Salamanca Statement and framework for action on special needs education.* Paris, UNESCO.

UNESCO. (2000). *The Dakar framework for action. Education for all: Meeting our collective commitments.* Adopted by the World Education. Forum. Dakar: Senegal.

AUTHOR PROFILE

Helena Hemmingsson

Helena Hemmingsson is currently a full professor in occupational therapy at Linköping University, Sweden. Her doctoral studies were conducted at Karolinska Institutet (KI) where she defended her thesis in 2002 titled "Student-environment fit of students with physical disabilities". After her PhD examination she was hired as a senior lecturer at KI and besides teaching she has initiated several research projects concerning school participation of students with disabilities. As the main supervisor she has supervised two doctoral students to their PhD examination and is currently the main supervisor of one PhD student and co-supervisor to two PhD students.

Helena Hemmingsson has been an occupational therapist since 1980 and before her academic career she worked in neurological rehabilitation and in school-based occupational therapy.

Email
helena.hemmingsson@liu.se

Merrolee Penman

Merrolee Penman is Principal Lecturer at the School of Occupational Therapy at Otago Polytechnic. Merrolee's research and practice interests are centred around learning – whether that be of children and young people with disabilities attending their local schools, or of occupational therapists. Merrolee has supervised several masters theses and honours dissertations on the topics of inclusion and the role of occupational therapists in supporting the right of the child or young person to attend their local school of choice. Merrolee is a doctoral candidate in the School of Education at the University of Otago, Dunedin, New Zealand.