

**LEARNING MODULE #1**  
**Part 2 of 2**  
**GATHERING ESSENTIAL INFORMATION AND**  
**ASSESSING STUDENTS**

**Part 2** contains the following topics:

3. Why Do We Need to Assess Students With Severe Multiple Disabilities?
4. Determining the Student's Strengths and Needs

**3. Why Do We Need To Assess Students With Severe Multiple Disabilities?**

We assess students so that we can better understand their needs; determine what barriers they face and what interventions or supports we should provide; and, finally, we assess to obtain a baseline measure so that the student's progress over the year can be documented.

The first step towards meeting the student's diverse learning needs is to identify those needs. There is a wide range of assessments that we can use to understand our students better. These include formal assessments, informal assessments, interviews with staff and family, structured observations and portfolio reviews.

**3.1 We Need To Describe The Student's Current Abilities And Achievement**

We should have a base line or foundation of the student's skills. We need to know what the student can do, what they can't do and what types of supports help them. For some students formal assessments can be very useful. However, for many students with significant sensory, motor or cognitive disability, formal assessments are not possible or practical. Instead, informal assessments based on observations of the student and interviews with staff can provide the needed information.

We can assess a variety of areas including:

**A. Emotional/Behavioural Skills**

See the PISP web-site for:

Functional Analysis of Behaviour

<http://www.pisp.ca/strategies/strategies136.pdf>

Motivation Assessment Scale

<http://www.pisp.ca/strategies/documents/MotivationAssessmentScale.pdf>



*The student is learning to sit quietly, with his hands down, and listen to the teacher's instruction.*

*Baseline Measure: **Duration** of time that the student remains seated, quietly and with hands down.*

**See Reference Section: Duration of Skill Performance Measurement Form**

**B. Social Skills**

See the PISP web-site:

<http://www.pisp.ca/video/documents/InclusionChecklist.pdf>



*The student is using a voice output device to let the secretary know that he is bringing in the attendance slip for his class.*

*Baseline Measure: **Amount of time** it takes for the student to activate the voice output device.*

**See Reference Section: Latency of Response Measurement Form**

*C. Life Skills (including self care)*

See the PISP web-site for Meal-Time Skill Development

<http://www.pisp.ca/strategies/strategies11.html>



*Grasping a finger food in order to eat independently is a very useful life skill.*

*Baseline Measure:  
Amount of time that the student is able to independently maintain grasp on a finger food.*

*See Reference Section:  
Duration of Skill  
Performance Form*



*This student is developing lip closure when drinking from a cup.*

*Baseline Measure:  
Amount of time that the student is able to close her lips around the spout of the cup.*

*See Reference Section:  
Duration of Skill  
Performance Form*

*D. Cognitive Skills (including perception, recognition, reasoning, judging, problem solving, remembering, imagining)*

See the PISP web-site for a hierarchy of Cognitive Skills:

<http://www.pisp.ca/strategies/documents/CognitiveSteppingStones.pdf>



*Identifying the colour 'yellow' is a Level 4 Skill in the Cognitive Stepping Stones document.*

*Baseline Measure: Accuracy of identifying colours when named.*

*See Reference Section: Accuracy Measurement form*

*E. Gross Motor Skills (including walking, running, balance, strength and flexibility)*

See the PISP web-site for a list of functional Gross Motor Skills:

<http://www.pisp.ca/strategies/strategies33.pdf>



*The student is increasing the number of times per week that she spends in her walker.*

*Baseline Measure: The number of times per week that the student uses her walker.*

*See Reference Section: Frequency of Behaviour/Skill*

*F. Fine Motor – (including written output)*

See the PISP web-site for a list of functional Fine Motor Skills:

<http://www.pisp.ca/strategies/strategies12.pdf>



*The student is learning to use her fingers to turn pages in a book.*

*Baseline Measure: The **Degree of Active Participation** exhibited by the student*

*See Reference Section: **Degree of Active Participation Measurement Form***

*G. Vision Skills*

See the PISP web-site:

<http://www.pisp.ca/strategies/documents/FunctionalVisionQuestions.pdf>

<http://www.pisp.ca/strategies/strategies31.pdf>



*The student is learning to look at the communication partner's face in response to a greeting.*

*Baseline Measure: The number of times that the student looks at the greeter.*

*See Reference Section: **Frequency of Behaviour/Skill***

### H. Communication Skills

To help determine a student's level of comprehension, see:

<http://www.pisp.ca/strategies/documents/ComprehensionChecklist.pdf>

<http://www.pisp.ca/strategies/strategies39.pdf>

<http://www.pisp.ca/strategies/strategies40.pdf>

<http://www.pisp.ca/strategies/strategies41.pdf>



*Initiating a conversation with an augmentative communication device is an important communication skill.*

*Baseline Measure: The **number of times per day** that the student initiates conversation using a communication device.*

*See Reference Section: Frequency of Behaviour/Skill*

### I. Academics (including literacy and numeracy)

<http://www.pisp.ca/strategies/strategies43.pdf>

<http://www.pisp.ca/strategies/FunctionalAcademicAssessment.pdf.pdf>



*The student is learning the letters of the alphabet.*

*Baseline Measure: The **accuracy** with which the student prints letters of the alphabet.*

*See Reference Section: Accuracy Measurement form*

### 3.2 The Challenge of Formal Assessment

Teachers and family members are often concerned about the cognitive or intellectual functioning of a student with sensory and/or physical disabilities. They hope that a cognitive assessment will help with understanding the student's abilities and the potential for growth. They also often feel that a cognitive assessment will help in developing appropriate individual educational plans based on cognitive strengths and weaknesses. This is a perplexing issue for a number of reasons. If students are thought to have limited cognitive potential based on their sensory and motor disabilities, then there are often few expectations placed on them, and less stimulating environments and learning opportunities provided. However, formal tests of intelligence may not be helpful in assessing cognitive abilities, for a number of reasons:

1. Standardized tests of intelligence are normed on typically developing children, with intact sensory and motor systems. Children are expected to have adequate fine motor skills in order to manipulate objects and to be able to speak intelligibly. Four communicative behaviours that emerge between ages of 9-13 months for normally developing children which are believed to be highly related to the later use of symbolic, spoken communication are **showing, giving, communicative pointing, and ritual requests**. A child with physical disabilities is often unable to demonstrate these behaviours. However, despite their inability to show, give, and point, children with physical disabilities often do develop symbolic systems of communication.
2. The few tests that are available that don't require verbal or motor responses tend to measure a limited number of cognitive abilities and provide norms only for a restricted age range. For example, some tests assess ability to discriminate between visual materials that involve a range of concrete and abstract items (e.g., shapes, colour, category, vocabulary). **Not only do these measures provide only a limited understanding of mental capacity but they also make the assumption that a student's visual skills are adequate**. The pictured stimulus materials are often placed very close together on a page. Many students with multiple physical disabilities also have sensory impairments, such as cortical visual impairment, and would find the pictures too crowded in order to discriminate between them. As well, if eye pointing responses are used, they are often difficult to reliably 'read' if the pictures are too close together. Modification of standardized measures so that students with physical and/or sensory disabilities can respond may invalidate test results. At best, they may give a rough estimate of cognitive functioning

that could be useful in defining educational goals and strategies for the student.

3. On formal measures of intelligence, the easiest items are geared towards the experiences of very young children. They are often inappropriate for older children. For example, a child with a severe motor impairment may not be able to bring his hand to his mouth, a skill that may be expected for a 3 month old. However, one would not expect him to achieve this skill in order to say that he is at that level. As well, children with sensory and motor impairments often do not develop skills in the same sequence as do typically developing peers.
4. Piaget's explanation of how the child develops through various cognitive stages relies heavily on the child's interactions with his environment. Indeed, the very name of the developmental period that has been of great interest to the study of child development, the sensorimotor period, is derived from the observation that the child is using sensory input and motor skills to explore and understand the environment. For individuals with disabilities, their early sensory and motor experiences with the world are altered by their disabilities. The difference for children with physical disabilities is obvious; they are limited in their abilities to explore and to act on their surroundings. For example, a child who has not been able to self-propel himself may have restricted spatial awareness. Inability to manipulate concrete objects may adversely affect development of number concepts. A child with sensory impairments has not been able to see, hear, feel, etc. the same experiences as children with intact sensory systems.
5. There are no convincing data to support a strict cognitive prerequisite hypothesis to the development of symbolic communication. The research about cognition and language is based mostly on data showing a correlation between cognitive development and the emergence of speech and not on experimental findings that demonstrate a cause and effect relationship. Although it can be readily agreed that there is a relationship between cognition and language, it should be recognized that the nature of this relationship is not clearly understood when applied to students with complex impairments.
6. Lack of world knowledge. Many items contained in standardized tests are not familiar to the child who has limited life experiences. A non-verbal child cannot speak and ask questions in order to get and assimilate information. A child with sensory and motor impairments usually has not had the same opportunities as typical peers to learn about the world.

7. The cognitive requisites in learning to communicate via signs or pictures appear to emerge at different ages than the production of first words. For example, first signs emerge as early as 8 months of ages and sign combination occur as early as 10 months of age. The total number of signs acquired by children learning signs exceeds the average vocabulary of spoken words reported for children learning speech, at least until 2 years of age. Labelling skills using a communication board can be taught to a child who has not reached the 12 month developmental level, which is usually when a child will say his first words.

In summary, test scores from formal measures of intelligence or development may not provide an accurate or useful picture of a child’s abilities. Rather, they serve to highlight the child’s disabilities. A student isn’t likely to “catch up” to typical peers by systematically going through all the developmental stages. He can, however, learn functional skills leading to a level of independence whereby he can meaningfully participate in his community.

### 3.3 Alternatives to Formal Testing

#### 3.3.1 Modifying Testing Formats

Formal tests of abilities often cannot be completed with students who have multiple disabilities because of poor motor control, visual impairments and/or lack of speech. Modifications can be made to some tests so that the student can respond. For example,

- a. Separate the pictures so that there is less visual crowding for the student
- b. Enlarge the pictures
- c. Use a means of responding that the student can control volitionally, such as head turning, eye movements, etc.
- d. Use a different response method: yes/no; numbers; same/different
- e. Use partner assisted scanning: Present test stimuli in usual way. The evaluator sequentially indicates response choices and student provides a specific response for the selected answer (e.g., finger movement, gaze movement).

Examples of determining direction following ability using the student’s physical skills:

Skill	Expected Development
Look at the window. Close your eyes.	By end of Kindergarten.
Look at the book, then look at the window.	By end of Grade 1.
Look up, then open your mouth, then look at the book.	By end of Grade 2.
Open your mouth, then look at the book, then look up, then look at the brush.	By end of Grade 3.

With regards to functional beginning academic assessment and cognitive assessment for those students who are too low for standardized testing, it may be best to use...

- concrete objects when taking data on sorting, matching and numeracy skills
- familiar stories with simple bright pictures when asking questions, which involve who/what/where

### 3.3.2 Use Informal Assessments

The Reference Section contains the following informal assessment tools as well as checklists that can help to determine where to start with the student. As well, consult with the student's Physiotherapist, Occupational Therapist, and Speech-Language Pathologist.

- Functional Gross Motor Skills for Classroom and School
- Functional Arm and Hand Activities
- PISP Vision Assessment
- Functional Hearing Skills Assessment
- Language Comprehension Checklist
- Assessing Symbol Use for Communication
- Stepping Stones to Developing Communication Skills
- Improving Intelligibility of Speech Data Collection Form
- Stepping Stones for Translating Cognitive Development into Educational Skills
- Primer Academic Checklist
- Functional Academic Assessment

### 3.3.3 Consider Collaborative Assessments

One particularly effective way of identifying important skills for the student is through a process called Collaborative Assessments. Team members conduct an assessment and observation of the student during a typical day or series of partial days and determine how the student responds under natural conditions in age-appropriate settings. They try to determine what skills the student already has and what would be the most empowering new skills for the student to begin to learn. The team members also observe typical students engaged in the regular program to create inventories that will be used to assess the student with special needs who is also a member of the class.

The teams usually include: the student's therapists (Occupational Therapist, Physical Therapist, Speech and Language Pathologist) and Special Education Teacher. By no means would all the team members observe and interact with the student at one time. Instead, the larger team develops an

observation/assessment schedule so as not to overwhelm the student or staff. The team then meets to discuss and clarify which skills would be most useful for the student to learn and these are then shared with the family, classroom teacher and assistant(s) for discussion before being entered into the IEP. Refer to some sample skills lists that have been collected from therapists for the population of students with severe multiple disabilities, in your reference section. These will give you ideas of skills that focus on the student's active participation.

The questions facing the team include:

*What are the student's current skills / abilities?*

*Do we have enough information to plan the student's program?*

*Do we know why the student is experiencing difficulty... with comprehension, with effectively making needs and wants known, with playing with others, with academic skills...?*

*What barriers exist to student achievement?*

*Do we know which strategies have already worked for the student?*

*What else do we need to find out?*

Although there are dozens of areas that we could potentially assess, it is important that we limit our assessment time to those areas that are most critical for the student's progress. Important assessment areas would be those in which we have questions or concerns that have not been answered or skill areas that need updating to determine the student's progress.

### **3.3.4 Sharing Assessment Results**

It is important that team members share assessment information with each other. The information from observations and both formal and informal assessments need to be reviewed with the collaborative team so that a shared understanding of the student is developed.

### **Reading**

- June Downing. Including Students with Severe and Multiple Disabilities in Typical Classrooms. Chapter 3, pp 49-55.

## Reference Section

- Acceptance/Rejection Questions Measurement Form
- Accuracy Measurement Form
- Assessing Symbol Use for Communication
- Assessment of Symbol Use for Communication
- Choice Making Data Collection for 2 Objects
- Choice Making Measurement
- Comprehension Data Collection
- Degree of Active Participation Measurement Form
- Data Collection – Sarah’s Month
- Data Collection Sheet for Comprehension Questions
- Duration of Skill Performance Measurement Form
- Frequency of Behaviour/Skill Measurement Form
- Functional Academic Assessment
- Functional Arm and Hand Skills
- Functional Gross Motor Skill for Classroom & School
- Generalization Assessment Form
- Latency of Response Form
- Primer Academic Checklist
- Stepping Stones for Translating Cognitive Development into Educational Skills
- Stepping Stones to Developing Communication Skills
- Switch Data Collection Form
- Sample Assessment Summary
- Toileting Measurement Form
- Vision Assessment
- Yes/No Questions Measurement Form

## Points to Ponder

- What assessments, formal or informal, have been completed for the student?
- Does the student require further assessment in specific areas?
- What would the measurement look like?
- Who is going to complete the assessment?

## 4. Determining the Student’s Strengths and Needs

### 4.1 Use The Identified Needs (And Strengths) To Develop A Program For The Student

Strengths and needs are more than just our observations of the student’s temperament or personality and they are more than just a question casually asked at the IEP meeting. Instead a clear, *evidenced-based* list of student strengths and needs can drive effective program development.

After gathering pre-existing information about the student, and completing informal assessments, you should have a much clearer idea of who the student is and what needs to be focused on for the school year. It's helpful to create a chart of strengths and needs:

**Example:  
Daniel's Strengths and Needs**

Areas of Strength	Areas of Need Needs to Develop...
Interested in what peers are doing in the class and sometimes wants to do what they do	Increase communicative competence to indicate needs and wants; answer and ask questions; request help
Handles most changes and transitions well	Increase functional vision skills
Loves music	Improve paying attention to teacher; waiting for a turn; following directions; following a visual schedule
Identifies 6 colours	Develop social play skills at recess & lunch
Understands same/different	Cognitive: Improve Categorization Skills
Tolerates being in stander for 30 minutes at a time	Academic Skills: Develop Functional Math Skills
Can grasp and release a small toy	Increase Independence - reduce dependency on cueing and prompting
Interested in specific topics - e.g, his cat	Increase grasp and release of a variety of objects
Counts 1,2,3	Increase independence with toileting and dressing

**4.2 What are the Student's Motivators and Preferences?**

Motivation plays a huge role in engaging students with severe disabilities. If the student isn't getting anything out of an activity, from his or her perspective, then there is not much hope that it will be a meaningful and successful learning experience. The type of motivator varies widely from one student to the next, but the most common motivators include:

- Social experiences - being involved with other students
- Movement - going fast in the wheelchair, swinging, swimming, etc.
- Sensory - vibration, massage
- Music
- Food

## Reference Section

- Strengths and Needs Planning Sheet
- Student Motivators and Preferred Activities

## Points to Ponder

- Have the assessments, either formal or informal, resulted in a clearer understanding of the student's strengths and needs?
  - Do team members share a common understanding of the student's strengths and needs?
  - Do you feel that enough information has been gathered to establish clear IEP learning objectives?
  - What have you learned about your student's unique motivators and preferences?

## 5. Activities Section

Refer to the Activities Section for both a Coaching Activity and the Applied Activities.