

**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: **Measuring Duration of Skill Performance***

### *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 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-sites:

<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.

**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.

- Gross Motor Objectives
- Vision Skills

- ASSESSMENT OF SYMBOL USE FOR COMMUNICATION
- ASSESSING SYMBOL USE FOR COMMUNICATION
- Pupil Check Sheet
- Comprehension Data Collection
- Cognitive Stepping Stones
- STEPPING STONES TO DEVELOPING COMMUNICATION SKILLS
- Functional Academic Assessment
- Functional Hand Arm Skills

### 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.

For example:

Daniel's teacher is very concerned about what his program should be. Daniel is now in grade 5 and does not read. He has great reluctance to hold a pencil and do any written work. His speech is difficult to understand. He enjoys the computer, but more for programs that have interesting sounds or music than for visual displays.

#### Previous Assessments

When Daniel was in grade 3, his Progress Report said that he knew all his colours and could recognize his name in print.

His Speech and Language Assessment of three years ago indicates that his language skills were well below average.

His Occupational Therapy Report 2 years ago says that he had lots of challenges with activities of daily living (doing/undoing buttons, opening and closing containers, using a pencil.)

His last Cognitive Assessment was completed 4 years ago. Daniel was described as having a severe intellectual impairment. His verbal abilities and non-verbal abilities were at about the same level.

#### What further assessments might this student need?

The school team has some information on Daniel although it is quite outdated. A few further assessments could update his skills list.

- Speech-Language Update
- Occupational Therapy Update
- Informal Assessment / Collaborative Assessment of Academic Skills
- Brigance Inventory of Early Development - Literacy, Numeracy, Fine Motor Skills, Personal Care, Life Skills

- Structured Observation in classroom – specifically focusing on Daniel’s level of independence and ability to participate meaningfully in classroom activities

*Another example*

Josh’s team met to determine their assessment plan. They had completed a file review that revealed the following:

Josh has a diagnosis of **Cerebral Palsy** and a **Severe Intellectual Disability**

The educational psychologist described Josh as having overall moderate intellectual impairment. His verbal scores were slightly better than his non-verbal scores. He had lots of challenges with tasks that require attention to detail, visual analysis, motor coordination and numerical reasoning. His strengths were his flexibility and his interest in peers.

On the challenging side, Josh needed a lot of cueing to get through the day. Josh wanted to join in with peers but didn’t seem to know what to do. His speech is quite difficult to understand

What questions did his team ask themselves?

What is Josh’s overall level of functioning in classroom – what is his level of independence?

What are his academic skills? What is his comprehension?

What social skills does he have – including individual play skills, social play skills and group skills?

What assessments did the team conduct ?

### **Classroom Skills / Learning Skills / Independence**

- Structured Observations of Josh

*What kind of prompting does he receive for tasks, following directions, etc?*

- Interview with parent and assistant

### **Literacy and Numeracy Skills Assessment**

- Informal check-lists
- Brigance Inventory of Early Development

**Social Skills Assessment – Collaborative Assessment**

- Structured Interview with parent and assistant - Using an Inventory
- Observations of student in classroom and on playground

**Josh’s Strengths and Needs**

<b>Areas of Strength</b>	<b>Areas of Need Needs to Develop...</b>
Flexible	Communication: articulation
Handles most changes and transitions well	Core Skills: Organization – attending, managing materials, completing tasks...
Few sensory issues	Social Skills: Group Skills – Improving Paying Attention to teacher, requesting help
Sight words	Social Skills: Social Play – development of social play at recess, lunch, etc
Understands same/different	Academic: Improving Listening Comprehension
Gravitates towards groups of boys on playground or in classroom during indoor recess	Academic Skills – Developing Functional Math Skills
	Increasing Josh’s Independence – very dependent upon cueing and prompting

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
- checklists, such as Cognitive Stepping Stones, which is located in the Reference Section.

**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

- Gross Motor Objectives
- Vision Skills
- Assessing Symbol Use for Communication
- Choice Making Measurement
- ChoiceMaking2objects
- Degree of Active Participation Measurement Form
- Data Collection Sample
- Pupil Check Sheet
- Comprehension Data Collection
- Cognitive Stepping Stones
- Accuracy Measurement Form
- Stepping Stones to Developing Communication Skills
- Yes/No Measurement
- Assessment of Symbol Use for Communication
- Generalization Measurement
- Functional Academic Assessment
- Functional Hand Arm Skills
- Switch Use Measurement
- Latency of Response Form
- Measuring Acceptance/Rejection
- Data Collection Sheet
- Frequency of Behaviour/Skill
- Measuring Duration
- Toileting Measurement
- Sample Assessment Summary

## 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

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.**

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

The assessment data can help us determine the focus of our interventions for the student. We use both the identified strengths and needs as the core of the student’s Individual Education Plan. *This is important for the IEP Module.* We can also use the information to establish priorities for intervention and support.

Example:

Jan’s team met to review her assessment results. Here are a few of her strengths and needs:

Strengths	Needs
Interested in what peers are doing in the class and sometimes wants to do what they do	Communication: Jan needs to continue to develop her ability to interact with class-mates
Emotionally Jan is very flexible – she can handle changes quite well	Adult support for safety on the playground
Has learned approximately 10 sight words last year	Personal Care: Jan needs to develop increased independence with toileting and dressing
Very interested in specific topics – likes to talk about her cat	Social Skills: continue to develop individual play and group play skills
Has learned to put her shoes on	Organization Skills: continue to develop skills in following directions, waiting for a turn, following a schedule
Recognizes her name in print. Counts 1,2,3	Modified Academics – literacy and numeracy

From this example you could imagine that her team may ultimately address all of her needs in her IEP, but they might prioritize some skills over others.

## 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 Preferences

### 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.