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**Chapter 10**

**Communication and Severe Disabilities**

**Isabel Amaral, João Ferreira**

School of Health Care

Polytechnics Institute of Setúbal - Portugal

**Project NEWS**

Language and communication difficulties are usually part of the characteristics of students with Severe and Profound Mental Disabilities (SPMD). The inability to properly interact in the environment entails severe limitations in development and learning, bringing communication needs to the center of student's intervention. Teachers and other professionals often mention the need for detailed information regarding communication and how they can better help their students communicate. Still, in the absence of speech, communication is often limited, as professionals do not always manage to use alternatives for communication beyond speech. The need to communicate at a pre-symbolic level, required for communication with many of the SPMD students, is often overlooked leading to fragmented and limited communication opportunities.

*What is communication?*

Communication is an innate capacity, and all people communicate. Because communication involves always a minimum of two persons, it is enough that one person interprets another person's behavior for a communication process to start. Still, the use of speech and language is not always a reasonable goal for many persons with SPMD (Orelove & Sobsey, 1991).

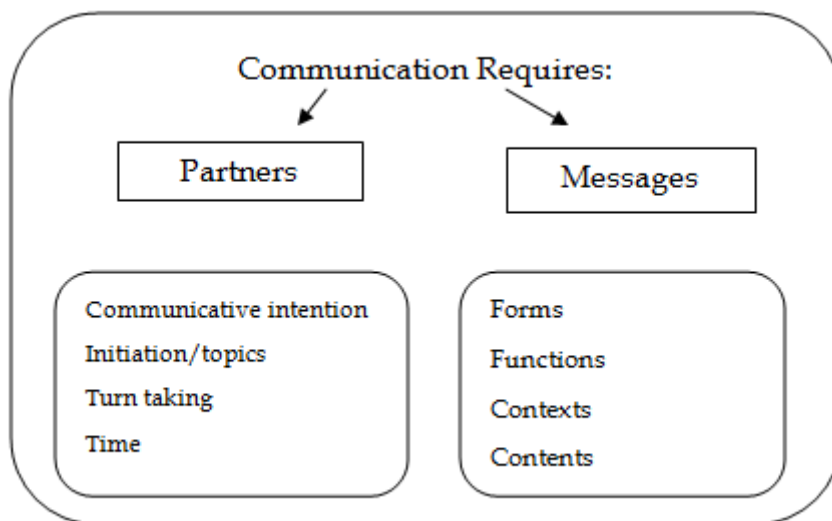
The term 'communication' is used to describe all aspects which make up any exchange of meaning, including speech, language, voice, fluency and non-verbal and pragmatic communication behaviors" (Ferguson & Armstrong, 2009). According to Devito (1986, in Heath & Bryant, 2000) communication is "the process or act of transmitting a message from a sender to a receiver, through a channel and with the interference of

## New Skills for Care Workers in Learning Disability Settings

noise; the actual message or messages sent and received; the study of the processes involved in the sending and receiving of messages

What do we need to communicate? Essentially, we need **something to say** (*Attention to objects and persons; motivation to share information*), **someone to say it to** (*available partners*) and **a way to say it** (*communication forms that respond to partners individual needs*)

To communicate we also need a **partner** and a **message**.



### Partners

Effective communication requires communication partners to show *communicative intention*, to share a *topic*, to *turn-take* in conversations and to take the necessary *time* for the other partner to interact.

**Communicative Intention** - people cannot “not” communicate nor can they uncommunicate. Efforts to say nothing usually communicate a number of messages: dislike, shyness, rejection, unwillingness to communicate, inability to communicate, and so forth (Heath & Bryant, 2000). It is enough that one partner assigns meaning to a behavior for a communication process to start.

**Communication Topics** – a need to have something to share with our partner, even if is as simple as asking the time. Communication topics can be started by a student looking at something he likes on the street. If interpreted by a partner, this can start a communication process.

## New Skills for Care Workers in Learning Disability Settings

**Turn Taking** – the ability to take turns in communicating with others. Each partner takes his turn and expects the other partner to respond. Chains of turn taking opportunities usually lead to conversations about topics.

**Time** - we need time to communicate and we need to allow other people time to communicate. In most cases students with SPMD need more time to process information and require, therefore, partners who are able to regulate time in order to allow them to take their turns in conversation.

### Messages

Messages can vary in its *forms*, have different *functions*, work in different *contexts*, and have different *contents*.

**Forms** - *pointing to objects, body movements, vocalizations, rocking a chair, using real images or black and white drawings* are examples of simple communication forms. *Natural gestures* (ex: waving good bye) and *speech* are also examples of communication forms which are associated to the use of language.

**Functions** - messages can have an array of different functions like *calling attention, requesting, refusing, commenting, rejecting and joking*.

**Contents** - sometimes contents are more difficult to distinguish, because the same communication form may have different meanings (pointing to a ball can be a *comment* or a *request*) and different contents can be expressed with the same form (pointing may be used to say “*I don’t like*” or “*I want*”).

**Contexts** - contexts combine the activity where communications occurs, the place where takes place, the people that are involved and that could be potential communication partners, the time when it happens, the sequence of steps of the activity where communication occurs.

So, communicating is not a simple task. To communicate with people SPMD is even a greater task, although more important, as the absence of communication severely impacts on development and learning.

### **Early communication and severe disabilities**

Characteristics of early communication patterns lead to identifying ways in which communication can be made accessible even to students with SPMD, since the forms used have a low abstraction level. The meaning of the communication cues used in such patterns is heavily dependent on well-defined contexts, but it conveys information and helps students understand what is happening around them.

Nonverbal communication fills much of exchange made between adults and students with SPMD. This non-verbal communication takes simple shapes which are part of the repertoire of any child during the first year of life and who are divided into three groups: 1) forms of communication involving the whole body, 2) forms of communication involving body parts and 3) information conveyed by actions in context.

*Forms of communication involving the whole body* are present in early stages of development, during which the infant is especially sensitive to movement and rhythm.

*The forms of communication involving body parts* are characterized by: 1) touch cues, 2) manipulation of objects, 3) gestures indicating objects, people or an action .

*Actions in context* also are powerful means of communication. If the context of an action is clear and understood by the student, and if these actions are performed as routines, students may ad information from one day to the next and increase their understanding of what is happening and what they are supposed to do in the activity

### **Forms of communication involving the whole body**

#### Movement and rhythm

From a young age infants are sensitive to the way they are handled. Movements, such as rocking, or babbling are simple rhythmic structures, and an early form of understanding the world. The use of simple rhythmic structures helps babies anticipate actions which supports the development of time organization and time concepts.

Movement and rhythm, if used in a sequence inform the baby about something that will happen, and are accordingly considered to be communicative. Interrupting a pleasant rhythmical movement raises the need to continue it and creates the need to ask for more. Around 5-6 months of age one can identify infant's movements that seek

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to continue interrupted rhythms, such as a baby jumping on mother's lap to "ask" her to continue the movement.

Many students with SPMD require interactions to include basic movement and rhythm patterns so that they can develop turn taking skills. A student who does not share attention between objects and persons is often at this basic communication level and requires professionals to understand that movement and rhythm might be the only starting point to initiate communication.

### **Forms of communication involving body parts**

#### Touching

The sense of touch is a proximal sense, i.e., does not allow distance between reality and our perception of it. When used in communication, it is helpful to identify environments, objects and people, and also to help with manipulation in real life activities. It does not, however, allow for high levels of symbolization.

For students with SPMD, this is sometimes the only communication channel usable.

Touching the student's body can be a powerful communication tool. For students who do not see, information given by touch becomes a valuable aid that allows them to maintain contact with the world and understand what people want from them.

*Tactile cues* can have different functions, such as informing that a person is present (e.g., touch the hand of the student), attracting attention (double tap on the shoulder), indicate what you want (take the student's elbow and move it up to indicate he has to get up), encourage the continuation of a task (touch the arm twice ), indicate that the student should stop doing something (touch and keep your hand on the student's hand), indicate that he needs to blow his nose (let him feel the tissue and then use the student's hand to indicate the nose). These tactile cues are extremely important when working with students with visual impairments, including difficulties in processing visual information.

One of the most important aspects of the use of tactile cues is how you touch the student. Touch is an invasion of an intimate space which should be used in such a way that it does not interfere with students' safety and well being. A touch too rough can cause startling reactions preventing the student from understanding what is expected from her. A touch too light can cause discomfort or may not be perceived by the student. Touch should be firm and pleasant, ensuring that it transmits information

## New Skills for Care Workers in Learning Disability Settings

without startling or causing unpleasant reactions. We need to make sure that touch conveys the information we want it to convey.

Touch is, still, an important channel for the development of understanding. Being able to touch objects or people enables the student to increase the available information about what is around, helping him interpret this information and increase knowledge of the world. When touch is associated with movement it becomes an essential element for exploring the environment.

### Objects

Objects can be extremely useful for information transmission. They can be used to *inform* (e.g. giving a spoon to the student at the table may mean "let's eat"), or to *request* (e.g. give the student a piece of kitchen paper so that he cleans the table) and may also serve to assist *anticipation* of activities (e.g., show the spoon in the classroom to say "it's time for lunch"). This information allows the student to increase his ability to think about situations before they happen, which is crucial for the development of anticipation and thinking.

When a student is able to anticipate events from objects you can begin to provide information on how the day unfolds putting objects in sequence, thus forming a day schedule (calendar). The student begins to be able not only to anticipate the situation that will happen immediately afterwards, but to predict how the day unfolds. For some students these calendars can be expanded and complexified progressively into week, month or even year calendars increasing the opportunity for teaching time concepts.

### Natural gestures

Sign language is usually too abstract for students with SPMD . When a student has difficulties in symbolization, natural gestures can be used but should contain information on what they mean. For example, take the hand to mouth can mean "eat", or form a ball with your hands can mean "ball" or "let's play ball."

Pointing is an important gesture, as it indicates that the student is beginning to refer to objects, people or activities. It is a primary way of distancing from reality and can be seen as a precursor for naming. Using the pointing gesture in interactions with a student with SPMD may also be a useful communication complement .In the case of students with some verbal understanding, pointing to an object/ person that we are

## New Skills for Care Workers in Learning Disability Settings

talking about makes it easier for students to understand what is being said.

### **Actions in Context**

Human development is the result of the interactions between the developing person and, 1) people in environments, 2) the physical and symbolic environments (Bronfenbrenner, 1993). Children's environments are valued as a crucial aspect for the development of language ([Vygotzky 1985](#)), and access to meaning. Exploring the world around them and interacting with people in the environment is, in itself, a search for meaning, helping develop concepts and attach names to concepts.

Much of the education of students with SPMD is based on the need to teach how to live and participate in natural contexts. Therefore, experiences in environments where activities take place are fundamental to students' success in the communities where they live. A student who is not used to have contact with various environments is limited in his knowledge and prevented from learning and from generalization of previous experiences.

Students need to understand a number of factors, in order to identify a context. These are: 1) the action, 2) the place where it runs, 3) the persons who performs the action, 4) the materials used, 5) time of the action and, 6) the purpose of the action. These aspects have to be predictable and organized, allowing the student to understand what he has to do and what will happen according to: a) spaces where the activity takes place, b) the time of day and, c) the people with whom they are.

When students use language, the need for defined physical contexts is reduced because language clarifies the context during conversations. But in the absence of language, the only way to ensure meaningful contexts is the use of actual physical contexts. Organizing intervention around real contexts supports meaning of what is said to the student. This adjustment is easier if intervention is based on real life activities and related to the student's life context. From these activities you can develop communication based on shared meanings that facilitate comprehension. Most students with SPMD have difficulty generalizing information, which makes communication more dependent on the use of clear contexts.



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### **The use of oral language**

Understanding a spoken message is much more than being able to hear it. It involves complex mechanisms for identification, comparison, association information that most students with SPMD have not mastered. Adult's use of oral language plays an important role, particularly if the student hears. But speech is one of the highest levels in the hierarchy of symbolization. Therefore, using oral language assuming that the student understands what is being said just because he hears is a common mistake that leads to limited opportunities for meaningful information. The ability to understand language depends also on factors beyond hearing, and relates to being exposed to diverse and significant environments, from which students extract relevant information that adds to the hearing capacity. Many students with SPMD have few opportunities to engage themselves in activities and have difficulties in relating what they hear with what is happening around them. Oral language only, thus, becomes an element of decoding difficult. Much of what is said through oral language only is not accessible to students and may even confuse him.

It is therefore important that the quantity and quality of linguistic information is used appropriately, and that oral language is supported by gestures, tactile cues or object cues to facilitate understanding.

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