## 2.7. FUNÇÕES COMUNICATIVAS DAS MENSAGENS EMITIDAS ATRAVÉS DOS RECURSOS DA COMUN ICAÇÃO ALTERNATIVA EM SALA DE AULA. <sup>12</sup>

Silvia Sant'Anna, Danielle Brito, Fernanda Obelar, Ana Clara Vidal, Leila Regina Nunes, Catia Walter, Carolina Schirmer Universidade do Estado do Rio de Janeiro

Communication seems to constitute the main skill to live in society. It refers to symbolic behaviors that occur in the interaction of two or more people that provide a form to create meanings between them (Bryen and Joyce, 1985). According to Fogel (1993), communication should be conceived as a continuous process where the partners adapt to each other and mutually co-regulate their behaviors.

Speech is the mode of communication more frequently used, even though it is not the only one (Nunes, 2003).Manual gestures, corporal postures, facial expressions, use of objects and pictures are employed to affect other's behavior as well. Augmentative and Alternative Communication (AAC) resources were intentionally devised to promote communicative accessibility to the non vocal people (Glennen, 1997; Hanline, Nunes and Worthy, 2007).

In Brasil, teachers have, just recently, been facing the complex task of educating those students with severe impairments in inclusive educational settings. Educating children and adolescents with severe motor and speech disabilities has been a challenge to professional teams. Research studies have pointed out, however, that most schools are not yet prepared to receive this non vocal population (Nuns and Nunes, 2003). The major purposes of a comprehensive research project conducted for more than two years were: a) to introduce the AAC resources into a classroom of a special school in the city of Rio de Janeiro; b) to describe and to analyse the communicative process of non vocal pupils with their partners at school. In the present study specifically we described and analysed the communicative functions of messages displayed when interacting in the classroom.

Method

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<u>Subjects</u>. Four nonvocal students, one boy – Victor - and three girls – Sabrina, Laura, and Julia - with cerebral palsy and light to moderate intellectual deficiency, whose age ranged from 18 to 27 years, and their teacher – Clara - participated as subjects.

<u>Setting and materials</u>. The study was conducted in a classroom of a special school for students with physical impairments. The meetings of the research team with the teacher were conducted in a large room of the Board of Education. Digital cameras, observational protocols, and a variety of AAC devices were employed.

Procedures. The research project was submitted and approved by both the University Ethical Committee, and the Research Committee of the Board of Education. The study, conducted during eleven months, was composed by two phases: baseline and treatment. During the five 30- minute baseline sessions, i.e., before the introduction of AAC resources, as well as in the seventeen 30- minute intervention sessions (after the introduction of AAC devices) the social interaction of the seven students and their teacher was observed and recorded. The intervention phase included diverse procedures, as follows: a) reading and commenting texts about AAC, b) offering a computer, a printer, Boardmaker and Widgit softwares to the teacher, c) offering suggestions of diverse types of low and high tech AAC devices, d) demonstrating the use of AAC resources in conversing with the students in the classroom, e) conducting weekly research meetings with the teacher to both plan the pedagogical activities, and to present passages of the recorded sessions of the teacher interacting with her pupils in the classroom. After these presentations, the teacher as well as the research assistants were encouraged to express their feelings and opinions about teacher and students performance. An observational protocol was employed to record and categorize the interactive episodes occurred in the first 15 minutes of each one of the 23 sessions conducted along 11 months. The communicative functions of messages displayed by four nonvocal students participating of diverse activities in the classroom were categorized following some suggestions given by Miilher e Fernandes (2006).

Variables definitions

a) Naming – act of giving a an object or person a name (pointing to the pictogram).

b) Requesting for attention- act directed to call someone attention to herself/himself.

c) Requesting for action – act directed to make someone performs an action.

c) Commenting – act used to direct others 'attention to an object or event.

d) Emotional – act to express a reaction of surprise, pleasure, annoyance caused by an event.

e) Reactive – act produced while student examines or interacts with an object or part of his/her own body. There is no intentional communication. It might have a selfstimulatory purpose.

f) Response to requesting information –answering someone's request for information. This request might be a yes/no question (that requires a very simple response) or a open question (that requires a more elaborated response).

g) Response to commenting - reacting to someone's commenting about an object, an event or a person.

h) Response to a request for action –performing an action required by someone.

i) Response to a request of permission – giving or not permission for someone perform an action.

j) Response to a request of attention – paying attention to someone who have asked for it.

k) Intention of response - Tentative to answer a request .

The mean percentage of interobserver agreement on the student-student interaction and modes of communication taken on 25% of the sessions, using the frequency ratio method was 90%.

## Results

The absolute frequency of the communicative functions of the messages displayed by Sabrina, Laura, Sabrina, Julia, and Victor are presented in the Table 1.

	Sabrina	Laura	Julia	Victor	Total
Naming	33	10	0	0	43
Emotional	33	6	1	0	40
Requesting for attention	41	19	2	13	75
Commenting	24	8	0	3	35
Requesting for action	0	8	0	2	10
Reactive	1	0	0	25	26
Response to requesting information (yes/no question)	381	92	70	5	548
Response to requesting	82	33	15	25	155

information (open question)					
Response to commenting	34	13	5	0	52
Response to a request for	29	8	8	11	56
action					
Response to a request of	8	3	2	0	13
attention					
Response to a request of	4	4	0	1	09
permission					
Intention of response	32	3	5	5	45

The most frequent communicative functions displayed in the students messages were considered as responses to someone's initiative, as responses to a partner asking a yes/no question or an open question. Responding to someone commenting and to someone request for an action were also frequent.

Among the communicative functions considered as initiatives – requesting for attention, naming, emotional and commenting were displayed with high frequency, as well.

Some examples are presented as follows.

a) February 29, 2009 (Example of Response to requesting information- open question)

In this session the teacher realized a activity with the students in the reading room, the students should choose some books to work with them during the semester.

Teacher: Where is the crab? Victor: (points to the figure in the book) Teacher: no, the crab? Victor: (points to the other figure in the book) Teacher: Ok, very well. And where is the fish? Victor: (points to the other figure in the book)

Teacher: That's it, the fish is here, take a look, it's the blue. And where is the octopus with a lot of legs, a lot of arms? Where it is? The big one with a lot of arms and legs? Show it to me!

Victor: (points to the other figure in the book) Teacher: This is the fish, where is the octopus? With a lot of arms and legs? Victor: (points to the right figure) Teacher: That's it, very well! b) March 11, 2008 (Example of Commenting)

In this session the teacher developed with her students a interpretation activity of Toquinhos's song calls "Bicycle". The students should choose between the words exposed in a inclined board, what was the right word the completed some sentences of the song.

Teacher: (Turns the inclined board to Joana) Joana will be the first one because before she was the last one. She will express a nice smile, and will show to me where is the word" friend"? Where is friend?

Joana: (Take a card in the inclined board e give it to the teacher) FRIEND. Teacher: That's it Joana. Hugo: Aê Joana, you pick the right card!!

c) March 27, 2008 (Example of Response to Requesting Information)

In this session the teacher developed with her students a interpretation activity of Toquinhos's song calls "Bicycle". In this activity the students should listen to the music and read the music's letter, then next they should choose between three different options the correct answer. The lyrics were written with pictograms and the students marked the answer that they considered the right one with a "X".

Teacher: Victor what is the word that complete this sentence? Victor: (points to a pictogram in the past) BICYCLE Teacher: Very Well!! Victor: (points to other pictogram in the past) Teacher: Hã? Victor: (looks at the teacher and points to the same pictogram that he had pointed before)

Teacher: Ok! Very Well!

*d)* March 31, 2008 (example of Requesting for attention).

In this session Laura requested her friends and teacher's attention in different moments.

In a first moment:

Laura (stretches his arm toward Victor's past to show something, but as Hugo is between them she complains)

Hugo: (Hei, hei, leave he alone!) Teacher: He already turned the page Laura!

In a second moment:

Laura: (stretches his arm toward Victor's past to show something, however as Hugo is between them she complains)

Hugo: Ô Laura!

Teacher: She is showing to Victor that he already does not turned the page and that he has to he has to turn the sheet.

In a third moment:

Laura: (Put her hands around her neck and laugh)

Teacher: Yes Laura! What is the right answer? Now that you read all the others options.

Laura: (While the teacher speaks, Laura stretches her arm toward her teacher, it seems that she intends calls her. And after she involves her hands in her neck and laugh, it seems that she intends tells that if her speech pathologist knows about this story she will hang herself)

Teacher: Yes! She will twist your neck, I know that! And I will help her! Put it here! (While the teacher says this sentence she offers the "X" to the student.

Laura: (Put her hand in her forehead, move herself in her chair and laugh).

In this same date during the activity Laura calls the teacher's attention:

*Laura:* (stretching his arm toward the teacher makes a gesture by putting a finger toward the mouth looking ate the teacher)

Teacher: Do you want to talk to me? Laura: (shake her head) "Yes"

e) September 5, 2008 (Example of Requesting Information)

In this session the teacher developed with the students a activity where using the cards they should ask their classmate perform some action. During the activity the student call the teacher's attention and make her a question.

*Laura:* (stretches her arm to get a card that the teacher didn't put on the table in front of her, but the teacher stops the act)

*Teacher: No! Joana and Sabrina will not get in because they are not here. Laura: (Put her hand around her neck e look at the teacher)* 

Teacher: No, no one is sick! Sabrina went to her mother's house and Joana did not came today, and I do not know why ok!? No, there is no one... Sabrina is not sick, she was just missing her mother that's why she cried yesterday ok! Now we will look here (points to other pictogram on the table) you told that I (show the card to Laura) did this (shows the card with the action to Laura). But, who I will do it?

## References:

Miilher, L. P. e Fernandes, F. D. (2006). Análise das funções comunicativas expressas por terapeutas e pacientes do espectro autístico. *Pró-Fono R. Atual. Cient*, *18* (3), 234-254.