

Communication Skills of a Child with Down Syndrome at the End of the First Grade of Elementary School

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Abstract

Each case of a child with Down syndrome is specific because it is directly related to the environment the child grows up in, develops, lives and learns. Although many conditions about Down syndrome tend to generalize the condition, particular characteristics are specific and depend on environment. In this respect, such issues must be approached as case studies. The goal of this research was to note, define and describe supporting strategies of language and communication skills development and learning outcomes of language and communication skills of a boy with Down syndrome at the end of the first grade of elementary school. Therefore, the role of prerequisites for developing boy's language and communication skills was also subject of this research. The participant in the case study was a first-grader with Down syndrome who has been included in the regular educational school system and attends classes supported by a teaching assistant. In addition to monitoring the student in class and analyzing the paperwork, parents were interviewed in order to understand student's language and communication skills development. The research results have shown that the student's preparation for school and activities, which were conducted before the start of the school year, played an important role in stimulating child's communication skills and later a successful inclusion into the educational process. The established partnership between the teacher, the teaching assistant and parents have resulted in creating an individualized education program and developing specific supporting strategies which sustained the boy's communication and language skills. Supporting strategies include application of adequate forms of work and development of learning and teaching strategies, based mostly on kinesthetic and graphic presentations which have been proved to be the most acceptable for the boy. This case study is the first ever to test the stated presumptions. Final assessments made by the teachers and statements made by parents at the end of the first grade of elementary school indicate the efficiency of applying the listed supporting strategies.

Keywords: Down syndrome, communication and language skills, supporting strategies, partnership with parents, learning outcomes

1. Introduction

In the Republic of Croatia, education at preschool, elementary school and secondary school level is based on the National Framework Curriculum (MZOS, 2011 [Ministry of Science, Education and Sports]), a document which promotes child-oriented education and hence respects humanistic theses of education.

National Framework Curriculum offers children in need of special education the same opportunities for participating in the educational process in the peer environment in compliance with their potential. Adjustment to student's individual abilities necessarily also requires creation of an affirmative class atmosphere, acceptance of different learning styles, introduction of adequate learning and teaching methods and strategies, active and cooperative learning whose goal is practical application of acquired knowledge and cooperation with parents as co-creators of the teaching curriculum.

Orientation towards the child and their specific needs is a basic part of the inclusive education of children with different educational needs and thus enables children with Down syndrome inclusion into the regular school system. According to Vica, Karamatić Brčić (2013), this inclusion is characterized by a sense of belonging, which implies that all the children are actively involved in school activities.

1.1 Down syndrome and implications for the educational process

Down syndrome (DS) is a genetic disorder caused by a failure of the 21st chromosome to separate during cell division and thus changes the development of the body, which includes brain development as well. Due to its specific occurrence, it is not considered a disease but a permanent lifetime condition of a person. This condition is characterized by several psychophysical characteristics which are mostly common for all persons with Down syndrome: poor muscle tone, slanted eyes, round face with a flat profile, short hands, low cognitive functioning...

These characteristics are also accompanied with specific disabilities such as auditory, visual, tactile, speech, language and communication difficulties. However, it is important to know that there is no universal rule

or any sign by which the level of disabilities or difficulties in persons with Down syndrome can be predicted. Moreover, the range of diversity related to mental capacities, behavior and developmental abilities in general is quite large. Each child, each person with Down syndrome is different. Only discovery and knowledge about specific needs and capacities of a single person enables the proper treatment and, accordingly, the most productive performance. Therefore, it is immensely important to ensure that the child is offered as free a development as possible and, as little as possible, limit the expectations placed on the child (Vuković et al., 2000).

The implications regarding the educational process are somewhat the same for all students with Down syndrome; delays in speech and language development, difficulty in verbal memory, developmental delay of fine and gross motor skills. Nevertheless, they are very good at visual memory and learning / acquiring any knowledge which is presented to them in this way. Therefore, although it can be concluded with increasing certainty that their cognitive profile is different from the profile of other children, what they have in common is the similar level of learning difficulties which imply similar help in reducing these difficulties in terms of adjusting the teaching methods (Daniels and Staford, 2003).

1.2 Difficulties in developing communication and language skills

This paper focuses on non-specific language skills of students with Down syndrome and application of support strategies which promote the development of communication skills in everyday teaching situations. According to Buckley and Bird (2010), children with Down syndrome are difficult to understand at the beginning of education because of their slurred speech and difficulties in arranging sentences. Nonverbal communication is their strong side; they understand more than they can verbally express, which often results in underestimating their ability to understand. Although the children are sociable and want to communicate, they participate in communication only when addressed, which means that they speak less than their peers and have less opportunity for speech and language expression. Although a little slower than children with regular development, children with Down syndrome easily learn and memorize words but find it difficult to master grammar due to difficulties in auditory and phonological short-term memory. Therefore, instead in sentences, they express themselves in series of keywords. In view of parts of speech, they more easily adopt nouns than verbs and hence quite often express themselves by naming the object, being or a phenomenon (Novak, 2009). By following the intonation and other indicators of nonverbal communication the recipient is expected to assume the context the spoken noun belongs to. Difficulty in speech and sound production slow down the progress in acquiring and understanding words. In fact, hypotonic musculature of oral cavity complicates development of speech in children with Down syndrome. A nasal tone, which can be detected in their speech, is caused by respiratory difficulties and inadequate steering of the air flow required for phonation (Ivanković, 2010).

It is the responsibility of the teacher to provide the student opportunity for everyday interactive communication, create strategies to support student's language skills and observe and encourage improvement and development of the student. Strategies which support the development of student communication skills during the teaching process should also result in improvement of a child's communication efficiency in everyday common situations.

2. Methodology

2.1 Goal

The goal of the research was to note, define and describe supporting strategies of language and communication skills development as well as learning outcomes which are related to communication and language skills of a boy with Down syndrome at the end of the first grade of elementary school. Therefore, the role of preconditions for the development of boy's communication and language skills was also part of this research.

According to the set research goal, the research addressed following problems and attempted to give solutions to them:

- 1) What are the required preparations for the individual work with a student with Down syndrome that should be defined and described in this respect?
- 2) What are the support strategies which support the development of communication skills and what is their role in developing language and communication skills, which would be defined and described in this paper?
- 3) What are the learning and teaching strategies which promote communication skills of a child with Down syndrome that should be defined and described in the paper?
- 4) What is cooperation with parents like? (Definition and description is expected)

- 5) What are the final achievements of learning outcomes at the end of the first grade with regard to the acquisition of skills, socialization and, finally, perception and evaluation of the entire individualized teaching process made both by the teacher and the parents.

2.2 The participant and strategies of collecting and analyzing data in the research

The participant of this research is a seven-year old first-grader of the school year 2010/2011 with a diagnosed Down syndrome. The research was conducted pursuant to Ethical Code of Conducting Research on Children (Ajduković and Kolesarić, 2003). Besides the student, his parents were also indirectly included in the research. The parents participated as subjects of the teaching process and the didactic agreement between the teacher, the student and parents, so that their opinion, assessments and understanding of student's language and communication skills development and the teaching process are of crucial importance for this research.

Since the issues and the participant of the research are specific, the application of the quantitative approach was not the optimal solution because, from the ontological and epistemological point of view, it could not result in appropriate, valid and reliable results, nor such interpretation and conclusion. Therefore, the qualitative case study approach was applied. A case study (e.g. Yin, 2003; Woodside, 2010) as a qualitative approach (Creswell, 2007; Hatch 2002; Hichcock and Hughes 2003; Holloway and Jefferson, 2000) is characterized by a holistic approach to the issue and different methods and strategies of collecting data and analyzing them. Any quality research usually includes the so called "bricolage", that is, application of different data collection methods (Denzin and Lincoln, 2005; Halmi, 2005), which is at the same time triangulation (Cohen, Manion and Morrison, 2007) and assurance of validity and reliability of collected data. In this research, several appropriate methods of collecting data were selected taking into consideration the characteristics of the issues, participants and the research goal (Berg, 2001). Primarily, the researcher, who in this case is also a practitioner (the teacher), systematically observes the student longitudinally for the duration of the school year. The analysis of documentation (analysis of contents) and an open interview with the parents are also included.

A systematic observation will be reported in detail as description of the observed and seen and then coded, analyzed and verified (Saldaña, 2009). The interviews were recorded; later the transcripts were made, then paraphrased and coded (Creswell, 2007; Saldaña, 2009). What followed was analysis and verification.

3. Results and Discussion

3.1 Preparation process for individualized student's work

3.1.1 Steps preceding enrolling a child with Down syndrome in an elementary school

When talking about a child with Down syndrome and analyzing the documentation, it becomes clear that the steps preceding the procedure of enrollment in the regular school are of great significance when making a decision and obtaining a positive opinion of experts (a psychologist, a primary care pediatrician who treats school children, an opinion of the kindergarten teacher if the child had attended a preschool facility...).

In accordance with the usual procedure when considering enrollment in a regular school of a child with evident difficulties, then a seven-year-old boy, who was by law required to start attending elementary school in the school year 2009/2010, was granted approval by the listed committee to postpone the enrollment for one school year in order to strengthen his cognitive skills and improve the general readiness for school.

In the next school year 2010/2011, the boy enrolled in the elementary school, became a first-grader of the Elementary school "Vladimir Gortan" and one of the first two students with Down syndrome to ever be enrolled in the regular schooling system in the city of Rijeka. The boy was included into the regular schooling system which he would be attending with help of a prospective teaching assistant.

3.1.2 Assessment of readiness for school

After the approved enrollment, a regular assessment of child's readiness for school was made by the school pedagogue. Apart from the assessment made by the pedagogue, child's readiness was also assessed by the parents in a written report which contained far more positive reflections. Naturally, barring the fact that a parents' assessment and opinion is expected to be far more subjective than the opinion of educational experts, such report made by parents is also a good indicator of child's personality and skills which the child did not manage to show during the short meeting with the pedagogue, a person the child hardly knew, in an environment which was unfamiliar to him.

3.1.3 Preparation for school

After consultations between the teachers, the school's expert team (pedagogue, principal, school speech therapist) and the parents it was concluded that additional effort must be made to facilitate the child's start of education. In fact, based on their personal experience and findings of a psychologist, the parents have been emphasizing how

important it is for the boy to maintain the routine, both in everyday situations and in constant close relationships with persons the child cooperates with (therapists, kindergarten teachers and others...). It was concluded that it would be extremely beneficial for the student to meet the teachers and especially the teaching assistant, who yet had to be selected, before the school starts.

When making the final decision about the selection of the teaching assistant, everybody expressed their opinion: the school principal, the teachers and, of course, the parents. They opted for the person who has already known the boy and who otherwise has personal tendencies for such work considering she is a volunteer in the city Association for Down Syndrome and also studies primary school education.

After a few initial meetings with the teaching assistant and exchanges of initial impressions and thoughts about making the student's adaptation to school as easy as possible and in accordance with the child's special needs, it was concluded that a certain preparation for the future daily school attendance and getting along would be of great importance and help for the student. It was agreed that one of the teachers and the teaching assistant would participate in preparing the boy for school with emphasis on establishing interpersonal relationships and encouraging the boy's communication.

During the summer, before the school started, the boy visited the school almost on a daily basis, accompanied by the teaching assistant or the parents, and was greeted by the teacher who was waiting for him at school. He successfully established contact with the teacher, especially through music activities and games which took place in the classroom and in the school yard. He got used to the teaching environment and used the didactic materials independently. He moved on school grounds on a daily basis and had the opportunity of meeting other members of the personnel (the janitor, the cooks, the librarian...).

This period of time, during which the boy had the chance to meet, get used to and then confidently master moving on school grounds at his own pace and according to his own needs, was very important for stimulating the child's communication skills and for later successful initial inclusion into the educational process. Besides the premises, meeting the teacher and members of the school personnel who were there at the time was also of great importance. The boy connected the faces and names of the staff with their duties and work space, adopted the habit of greeting the staff and talking to them.

3.1.4 Individualized education program

The preparation process had the purpose of observing and meeting the student through his reactions and moods in order to make the beginning of the school year as professionally easy as possible in terms of adjustment to the child. The experience which the teacher and the teaching assistant gathered during their everyday interaction with the boy made the creation of the Individualized education program (IEP) significantly easier. The individualized curriculum is generally based on core and development curriculum and is created according to the professional assessment on student's needs in order to enable and follow the success in achieving educational goals. Its planning is based on realistically set goals and student's preferences, from his identified abilities and also contains data about the required forms of support, the course of support implementation and the achieved outcomes (National framework curriculum, 2011).

Before the creation of the IEP began, an initial assessment had to be made. This assessment was also largely based just on what the child had shown during the preparation period. The initial assessment is the basis of planning the activities and support strategies in an effort of achieving the planned learning and teaching outcomes. Support strategies also imply adjustment of methods, means, forms of work, procedures and requirements in accordance with education contents and regarding the student's individual personality.

As knowledge and skills, which the child had when enrolling in elementary school, the following was recognized: knowledge of all capital letters, reading, arranging numbers and most of the academic knowledge which is considered a precondition for enrollment.

On the other hand, the greatest need for improvement was in the field of language and socialization (one word expressions, intonation, and arbitrary behavior due to inability to establish communication, insecurity, adjustment to premises and people, repetition...). Therefore, the focus of the work has always been development of communication and, consequently, socialization skills.

3.2 Support strategies for development of communication skills

When planning the support strategies for development of boy's communication skill, his strengths and everything he likes and enjoys were the starting point. It became apparent that the boy favors routine, graphic illustrations, has a well developed sense of rhythm, is motivated for leafing picture story-books and arranging graphic illustrations, doing puzzles and exploring sounds of musical instruments. When planning the activities and learning and teaching strategies, the child's personality and his emotional state had to be taken into account.

The boy felt safe in familiar surroundings, but he was extremely sensitive to new people, loud talk, sudden changes in light and noise. He verbally expressed himself in simple sentences which had more situational than communication function.

The boy was enrolled in a class where activities are organized in activity areas in accordance with the program Step by step - a child-oriented methodology which stems from theory of constructivism and age-appropriate teaching (Burke Walsh, 2002). One of the main principles of the program is tolerance and respecting the differences. To achieve a child-oriented learning and teaching means to adapt, create and select educational strategies, methods, techniques and means which influence the child's whole personality in accordance with its individual needs. The child's development must be encouraged in a cooperative and challenging surrounding and learning should become an act of personal curiosity and need (Miljević, Riđički et al. 2000).

3.2.1 Learning environment

The learning environment is organized so that it allows the students the freedom of movement and choice of activities according to their interests and wishes. Mayer (2005) considers a well prepared learning environment one of the main characteristics of good teaching which positively influences the development of cognitive, social and methodical competences of all the students in the said class. Activity areas offer learning materials (mathematics area, reading corner, writing area, building blocks space, and art area) are placed in different areas in the classroom in a logical manner (noisy areas are separated from areas where quiet activities take place).

3.2.2 Learning and teaching strategies which encourage communication skills in children with Down syndrome

In developing learning and teaching strategies in order to encourage communication skills in a child with Down syndrome the starting point was the knowledge about the importance of interpersonal communication which the boy establishes with his peers and adults in school and understanding of the way the boy learns. Student interpersonal communication supports the development of communication skills of all students in a natural way. According to Reardon (1998), interpersonal communication is changed according to the participants knowing each other. Taking the stated fact into account, in order to promote and make the development of interpersonal communication in class as easy as possible, the students were explained the speech difficulties which the child with Down syndrome encounters. They were very patient when communicating with him and when they could not understand what he was saying; they would ask the teacher or the teaching assistant for help. In addition, the students tried to adjust their voices during activities bearing in mind that the boy was sensitive to noise and high tones. They learned how to attract the boy's attention and include him in joint activities but also how to recognize the situation when a group activity was not in boy's favor. Namely, at the beginning of the school year, individual teaching activities proved to be more efficient for working with the boy. The boy was gradually introduced to group activities which were stimulating for his social development.

Learning and teaching strategies were mostly based on games and the cognition that the easiest method for the boy to acquire knowledge were graphic and kinesthetic illustrations. The focus was on patterns which were jointly created by the teaching assistant, the teachers and the parents and which were compatible with teaching contents. Observation of the child's moods and present state determined the choice of learning and teaching strategies as well as working methods in a specific teaching situation.

When planning and acquiring new contents, it was very important to start from the immediate reality and connect new terms with something which was very familiar to the child thus minimizing abstract segments as much as possible. Graphic illustrations, family photos, photos of students and school personnel were often used during the teaching and learning process. The photos were used as a multiply useful educational material for playing not only by the boy, but also by other students in the class. The students practiced phonemic analysis and synthesis, arranged photos in alphabetical order of names, completed sentences according to photographs orally and in writing, asked and answered questions.

In order to establish a routine, every day started with a morning meeting on the tatami in the classroom. Announcing each new activity which was about to follow and advising the boy on rules of behavior proved to be very efficient. ("Now, we are going to sit quietly and listen to the story. After that, we are going to stand up and act.")

The boy participated in all school activities. Like other students, the boy was encouraged at morning meetings to report about activities from his everyday life by describing photographs (swimming pool, birthday, picking olives...). His reports were well prepared in advance by the parents and the teaching assistant. He spoke in short sentences and tried to articulate sounds properly. His every report in front of students and the teacher was rewarded with applause by the students. This made him happy so he asked the teacher to give him additional tasks, which he successfully completed.

When he was tired, he showed signs of impatience and dissatisfaction by trying to leave the classroom.

According to Nill (1994), teacher's mastering of nonverbal communication creates the opportunity of sensitization and deciphering student's nonverbal signs and facilitates the communication process in the class. That is why it was necessary to pay more attention to nonverbal signs of communication to anticipate such situations but also to teach the boy to use appropriate sentences and express his wishes for changing the activity and surroundings (May I go to the library? Is it time for a break?). The boy gradually replaced the mimics and gestures which he was using to express his emotions with shorter sentences (I'm tired. I like it. It's noisy. I don't want it).

In creating opportunities for communication and learning, recordings of dance performances in which a student from the class participated also proved to be very useful. First, the boy would watch the recording in full and then the teacher or the teaching assistant would pause the recording and ask questions which included predictions of what will happen next during the performance.

With regard to the perceived short-term attention, a doll (a bee) was often used in classes as means of attracting the boy's attention and steer him to another activity. By playing with the doll, the boy communicated with other students (Finish the paintings! Children, get in line! Let's take a recess! Quiet, please! Please, get ready for art class!).

The boy enjoyed listening to counting rhymes of musical stories, memorized them effortlessly and recited them practicing the proper pronunciation. The well-developed sense of rhythm worked in the boy's favor and significantly helped the teachers in developing learning and teaching strategies related to phonemic analysis and synthesis, hyphenation into syllables or separating words in sentences. The boy easily hyphenated words into syllables or separated words in sentences by clapping his hands at the same time. He also pronounced memorized sentences while walking around the classroom, where each step represented one word. From time to time, some specific messages which were directed to him had to be "sung" in order to attract his attention or direct it to some other activity, to which he reacted positively and with a smile.

The boy found dramatic plays, which were created by students with teacher's help based on students' favorite stories, extremely motivating and exciting. He learned from his peers by imitation and modeling. Considering his ability to memorize things, he memorized roles of all students with ease, moved in space, imitated and thus provoked admiration.

3.3 Cooperation with parents

The mentioned learning and teaching strategies which support communication skills and verbal development of the student are part of a carefully planned holistic educational child-oriented strategy in which establishing a partnership with parents plays a significant role. It was very important to familiarize parents with planned teaching contents and jointly agree on learning and teaching strategies which would support the overall development of the child with focus on communication and speech skills and in which the parents, with cooperation of the teacher and the teaching assistant, actively participated. One must bear in mind that parents know their child well and can not only predict but also anticipate his reactions, especially to the unfamiliar surroundings and situations. By being familiarized with the teaching contents and activities which were to be introduced in school, in cooperation with the teachers, they prepared the boy for experiencing new things in advance (e.g. a visit to the fire department), which proved very efficient. The teacher prepared photographs for each activity. These photographs were later a valuable reminder not only for the boy but for all the students when they were retelling the experience or creating new stories.

The parents were also a valuable source of information about strategies which have continuously been used when treating the child as part of the Hendle therapy, *Holistic Approach to NeuroDevelopment and Learning Efficiency* (Bluestone, 2004), which the teachers encountered for the first time. The recommendations and advice of the boy's Hendle therapist were a valuable asset in planning learning and teaching strategies with emphasis on respecting the neurological and developmental needs of the boy.

It was especially important to give parents feedback and insight into ways in which the child coped with everyday challenges and into his emotional states so that they could follow and support the development of their child, in which the teaching assistant played a significant role. She reported on a daily basis all the boy's activities and steps in sense of socialization and communication in a separate info pocket notebook. The parents were also allowed a flexible schedule of meeting the teachers so that they could obtain information about their child's progress at any given time and also inform the teachers which were the implications of school activities on everyday life of their child. According to Henning (2001), cooperation with parents which is based on openness and trust is of crucial importance for the progress and the development of the child. Partnership with parents and the personality of the boy with Down syndrome have directed and improved professional education

of teachers and their whole educational approach and work in general.

3.4 Final assessments at the end of the first grade

At the end of the first grade, the boy successfully acquired all learning outcomes covered by the individualized education program and was rated excellent. A significant example of boy's evident changes and positive progress in the field of communication and speech skills is best shown through positive statements and opinions about final outcomes made by the teachers and parents likewise. In this respect, according to the teachers' report, the boy pronounces words more clearly and understandably and replaces the imperative way of expressing with sentences structured as requests or questions while retelling specific events:

“By comparing the knowledge and skills of the student when he started school, at the very beginning of the school year and now, at the end of the school year, the student's multiple progress is evident. A significant improvement of speech and improvement in communication skills are fields where the progress is the most obvious. Imperative sentences are more often replaced with requests (with the raised hand) and questions in form of full sentences. Associative speech is more often replaced with systematic retelling of events which the student is now able to retell with assistance. Pronunciation of word sounds and sentences is clearer and more understandable. Social skills are a field which requires additional development, although a slow improvement is evident (the boy approaches his peers, participates in games, and asks if he could borrow somebody's things...). Likewise, the field which has shown great improvement when compared to the student's skills when starting the first grade is a greater autonomy (in putting on his clothes, eating, putting away his things...). This autonomy is also displayed through student's utilization of school premises and navigation in and around school premises. The student has acquired all teaching contents covered by the individualized education plan for the first grade (of the school year 2010/2011) and developed the planned skills and abilities accordingly.”

As for the adoption of new skills, it turned out that the parents assessed the school work and activities to be useful for the student and that he has been making a constant progress in different aspects of speech and communication, that is, in cognitive, social, emotional and psychomotor aspects, which the parents wrote in their statement:

“He also continuously adopts new skills outside classes which are the result of doing school activities – his progress, his content, increased self-confidence, and understanding of his surroundings. The progress is evident in all aspects: starting from simple household chores such as tidying up, putting on clothes, taking care of himself and his belongings... crossing the street... using the computer and other gadgets which he finds interesting..., physical skills which he has not previously completely mastered such as jumping, walking on the narrow wall, swimming this summer ... to important communication skills, developing emotional self-control, exercising patience – waiting in line, accepting activities he considers uncomfortable (having his hair cut, ..) etc. The parents have especially emphasized progress in socialization, which may be the result of developing language and communication skills. The progress is particularly visible in making friends with other students of his class and in the larger motivation of attending classes. The parents describe it in the following way:

“... here, the biggest progress has happened, a leap in his development. He communicates with his surroundings much more and the interaction is more intense. He approaches his peers on his own and plays with children, which was not the case before. Negative behavior has drastically been reduced, he tolerates situations or surroundings he considers unpleasant better, he acknowledges people and children who surround him and with whom he interacts. Furthermore, he is very happy when he thinks about school and this state has a positive influence on his whole day, that is, life. Every morning he goes to school with joy. He is so motivated and focused that the accompaniment of his twelve year old sister suffices and he does not make attempts to sidetrack unpredictably or cross the road dangerously and without paying attention.”

In relation to activities of class teachers, it turned out that they have adjusted teaching contents and school situations to boy's abilities and preferences and even moods with great care and understanding. Their gentle and gradual introduction of life knowledge, relationships and duties is ideal for the boy. The transition from plays to learning is subtle and very encouraging. The parents have assessed that there is a visible positive progress in relationship to teachers:

“The friendship and affection the children from his class treat him with confirm it and is a direct consequence of some parts of teachers' work results and spirit.”

Furthermore, the parents are also of opinion that the teaching assistant is of great help to their son. They also emphasize the optimal achievement of learning outcomes, communication with the teaching assistant but also with other students in their son's class. They describe it in the following way:

“We are extremely satisfied with the relationship between the teaching assistant and the student and her role in

the class. The results are evident in all segments of student's learning and class attendance. The student feels safe but is not overprotected; he has established a very good relationship with children and school staff, has a great support when dearly needed and is given deep understanding of his needs and abilities while at the same time providing him with freedom of speech and movement which he strongly craves for – all in all, he is given all preconditions for developing independence and healthy relationships with his peers. The teaching assistant has strongly facilitated the boy's inclusion among peers which, without her presence, would have been impossible; she also enabled numerous obstacles between the child with special needs and the surroundings to be overcome in the way that her approach and work got out "the best" from the child.

When asked what they would describe as the child's greatest progress, the parents have answered in the following way:

"Socialization! Facilitated relationship with children and adults; everyday contacts e.g. on the playground, in the store; he tolerates and accepts the crowd, the noise, new places and sounds much better. Then, communication. He decidedly talks more, retells everything he has experienced or seen orally or even in writing or with a drawing. The progress in autonomy is also evident. He has adopted a large number of daily activities and duties, is independent in doing many activities, cooperates and helps in household. Next is mathematics. He is making progress, has good results and is motivated for acquiring new knowledge. Then, physical activity. He has started showing interest for different sports and his coordination is getting better. His staying and doing activities in a large and noisy sports hall with a lot of children is great success."

When asked what field should be paid more attention to in the future, the parents have said the following:

"The success and progress are evident in all fields, but we would be even more content and happier if our son would become even better in terms of obedience, patience, cooperation, easier adoption of new activities and contents and a longer attention span and concentration on a specific activity."

There is a general positive progress of the student in cognitive, affective (emotional), psychomotor and social sense. Likewise, since different methods of collecting data, that is, triangulation (Cohen, Manion and Morrison, 2007) have been applied, it is evident that such data coincide. In other words, different approaches have confirmed the positive role of individualized approach in developing language and communication competences of a child with Down syndrome.

4. Conclusion

The preparation period of student's adaptation to school which was planned and carried out exclusively based on the agreement among the teacher, the teaching assistant, the school professional team and boy's parents with the support of the school principal played a significant role in encouraging and developing communication skills of a child with Down syndrome. Before the school year started, the boy had the chance of coming to school accompanied by the teaching assistant, meeting the teacher and establishing communication with her as well as participating in planned activities based on games. Exploring the school premises and meeting the school personnel helped training the child's communication skills and getting into a routine of coming to school.

Partnership relations among the teaching assistant, the teachers and the parents resulted in planning and carrying out teaching activities base on a kinesthetic learning and teaching method which has proved to be the best approach in this case. Permanent education of the teaching assistant and the teachers for working in an inclusive teaching process which includes children with Down syndrome which was initiated by the Croatian Association for Down Syndrome, besides an extremely important exchange of experience and adjustment of teaching aids, is also a motivation for further research and looking for the even more effective learning and teaching strategies for children with Down syndrome in encouraging language and communication skills.

According to the conclusions, the recommendation for future practice is primarily the individual approach to organizing the teaching process for students with Down syndrome. Furthermore, optimal preparation for an individualized approach is of great significance. Inclusion of a teaching assistant, that is, during the learning process of students with Down syndrome, is of crucial importance.

Finally, possible limiting factors and shortcomings of this study must also be mentioned. Namely, a possible shortcoming and a limiting factor could be the fact that the research has not also included other students from this class which would have provided their understanding, opinion and assessment of working, learning and coexistence with a student with Down syndrome. Furthermore, it would be advisable to include more students with Down syndrome, especially from different classes and different schools and regions of the Republic of Croatia. It would also be advisable to study the progress of communication skills in different teaching areas separately. Furthermore, due to the specific characteristics of this phenomenon, it is strongly recommended that further studies should concentrate on research whose subject would be children in different environments of

parental and institutional upbringing, which would ensure significant scientific conclusions of crucial importance to the subject. It is also justified to recommend application of action-based research in order to implement new scientific conclusions in upbringing of children with Down syndrome in a critically optimal way. At the same time, the mentioned research shortcomings present possibilities of future and new research of this issue.

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