Cooperation among Pupils in the Classroom

Pupils' voice about cooperative learning in a purposefully selected primary school in Sarajevo, Bosnia and Herzegovina

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Abstract

Cooperative learning as a model of the cognitive social approach to teaching aims at encouraging the overall development of a child in both academic and socio-emotional aspects. In the classroom developing towards inclusion, cooperative learning has been seen as a scaffolding method which promotes interaction among pupils who differ in level of mastery, socio-ethnic and language background, individual and special needs.

This research thesis focuses on the issue of cooperative learning perceived from the pupils' point of view based on their personal experiences. The study was conducted among 44 pupils in 4th and 8th grade in a purposefully selected primary school in Sarajevo, Bosnia and Herzegovina. The aim was to investigate how the pupils perceive cooperative learning, by letting them write an essay related to eight aspects of cooperative learning. In order to gain more in depth information about the same topic, but from a different angle, three pupils with high level of mastery and three pupils with different special needs were interviewed. Document analyses were partly used in order to review background information in the study. Thus, this is a mainly qualitative study with a quantitative component. It is based on an essay approach combined with additioned interviews and document analysis. It was targeted to investigate and describe cooperative learning voiced by pupils.

The study was grounded on theories that emphasize the role of social interaction and mediation in the child's learning and development such as Vygotsky's social constructivist theory (the proximal zone of a child's development, 1978), Rogoff's (1990) socio-cultural concept of apprenticeship and Feuerstein's theory of mediated learning (1979) in order to support the findings and make the study clear.

The overall findings in this study showed that cooperative learning was perceived positively and satisfactory related to all of its eight aspects. The research has also shown in general that consistently applied cooperative learning enables the creation of a considerable efficient teaching and learning process for pupils with different levels of mastery based on support and mediation of classmates. The study indicated that pupils with special needs were active participants in different learning activities inside and outside classroom, receiving help according to their pace of learning and personal needs. Friendship and care for each other seemed to be what pupils like most with cooperative learning while non-communicative skills and self-oriented pupils were perceived not so popular traits. In order to improve several aspects of cooperative learning perceived as dislikes, the pupils gave priority to joint decision making, active listening and respecting rules. It was suggested that teachers should acquire more knowledge about cooperation in order to be even more skilled and flexible in organizing cooperative teaching approach.One main conclusion is that the pupils'voices should be applied in further teaching and learning processes with focus on cooperation, which is recommended for all; teachers, parents and other persons.

Keywords: pupils'voice, cooperative learning, mediation, classroom toward inclusion.

Acknowledgment

Dedication

This thesis is dedicated to all children and teachers who lost their life during school activities in the last war.

List of abbreviations

BiH will be used instead of Bosnia and Herzegovina

FBiH will be used instead of Federation of Bosnia and Herzegovina

RS will be used instead of Republic of Srpska

UNDP will be used instead of The United Nations Development Program

OSCE will be used instead of The Organization for Security and Co-operation in Europe

EU will be used instead European Union

PSAA will be used instead pupils with strong academic abilities

PSN will be used instead pupils with special needs

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Chapter 1: General introduction to the study

1.1. Introduction

This study is focused on cooperative learning among pupils in a purposefully selected primary school developing towards inclusion in Sarajevo, Bosnia and Herzegovina (BiH).The main intention of this study is to investigate pupils' perceptions of their experienced cooperative learning in two purposefully selected classes, in 4th and 8th grade. A specific additional focus is on the perceptions of the pupils with some kind of special needs as well as fast learners. Chapter 1 deals with the background situation in BiH in the light of its geographic position, its current society and its elementary education. Furthermore, this chapter contains an argumentation for the significance of this study, description of the research problem, research questions of this study and definition of main concepts.

> "Coming together is a beginning
> Keeping together is a progress
> Working together is success."
> Henry Ford

1.2. Background situation of Bosnia and Herzegovina

1.2.1. Geographic position and current society

The arena of this study is BiH, a heart shaped land, situated in South-East Europe in the western part of the Balkan Peninsula. It covers totally 51,209.2 square kilometers of which 51,197 square kilometers is land and 12.2 square kilometers is the Adriatic Sea coast (Federal Office of Statistics, 2006). Sarajevo, the capital city of BiH, is often called "The European Jerusalem", this being the result of centuries long tradition of integration and tolerance from different cultures. Today, BiH is divided into two Entities and one the third much smaller territory of the District Brcko: the Federation of Bosnia and Herzegovina (FBiH) which forms 51% of the territory of the State and which is administratively divided into 10 cantons, the Republic of Srpska (RS), which covers 49 % of the territory of the State and Brcko District under the exclusive sovereignty of the State of BiH with a single, multi-ethnic, democratic government.

The official languages in BiH are Bosnian, Croatian and Serbian, three related Slavic languages. The population[2] is estimated to be around four million people (Federal Office of Statistics, 2006).

Until 1992 BiH was part of former Yugoslavia. From the first of March 1992, BiH started as an independent country. The period of war from 1992 till 1995 had enormous consequences for the current society of BiH. About 258,000 inhabitants of BiH were estimated to be killed or missing during this period, (UNDP, 2003). Around 1.2 million of refugees were displaced in different countries and 1 million were displaced inside BiH. Today, 300.000 refuges and displaced persons still need permanent solutions of returning to BiH. Around 80 % of housing property were devastated and burnt in BiH (Ministry of Humans Rights and Refugees, 2006). The consequences of the war reflected on problems in social, economic, political and educational aspects of the society. It resulted in incomplete families, unemployment, social poverty, corruption and criminal influences, inexistence of adequate legal regulations, non-implementation of existing laws, and disharmony between the entities. Today, BiH is on a good way of reconstruction and further development of a new vision to expedite integration into the European Union. Implementation of good reform programs creating a democratic civil society gives positive results, but according to our expectations and needs of society, it is still not enough. Besides our social and economic system, the educational system goes through many progressive reforms on all levels including elementary education. Due to the political situation, the quality and standards of education have suffered. Hence, our education is one of the four economic sectors whose reform is a priority in the Medium Term Development strategy BiH[3] (OSCE BiH, 2005. *Report on education in BiH*).

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2 Through centuries as also today in BiH there exist a multiethnic structure of populations: Bosniacs (Muslim), Serbs (Orthodox Christian), Croats (Roman Catholic), Jews and the remainders of the populations is made about seventeen smaller national minority groups, the largest of which is the Roma population.

3 The place and role of Education in the Development Strategy, BiH is treated as an economic sector that through long-term investment and social capital, contributes to realization of economic development, reduction of poverty and expedites integration into The European Union (EU) (Organization for Security and Co-operation in Europe Mission to BiH, OSCE MBiH 2005.)

1.2.2. Elementary education

Primary education in BiH is compulsory and free. The duration of obligatory elementary school is 9 years. The majority of primary schools are governmental but there also exists some private schools. According to reform programs, the educational system in BiH is aiming to surpass the traditional, "ex-cathedral" teaching approach with a grading system which is used on a weekly basis. The main intention is to convert from a teacher/content centred education based on a traditional ideology, to child-centred education. The National Curriculum in Bosnia and Herzegovina's primary schools was tailor-made for the "average" pupils and there were a lot of unnecessary contents. It emphasized encyclopaedic knowledge of pupils, which is not functional in order to meet the children needs (Kolouh-Westin, 2004). Usually, pupils were not active members of the learning process and they were passive recipients of knowledge. The education process was characterized by absence of communication, interaction and cooperation between teacher and pupils, between teacher and parents and between pupils themselves (Smajkic, 1998:44).Today, the National Curriculum functions in education system of BiH as "numerous isles not sharing a sea" (OSCE Mission to BiH, 2005). It varies according to different parts of BiH. The content of the curriculum such as the national group of subject[4] and their interpretation are different in some parts of the Federation BiH and the Republic of Srpska. The education workers are not prepared to implement the ongoing National Curriculum, as Smajkic (1998) asserted, "according to changes in children's population[5] in the after war school environment and currently system of transformation for elementary education in all segments". Due to the circumstances, the process of education reform in BiH, the

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[4] The national group of subject are: mother tongue, literature, geography, history, nature and society and religious instruction. They are interpreting according to the majority of Serbian and Croatian people in the Republic of Srpska and in the part of Federation BiH

[5] In after-war period, primary schools deal with an increscent of children with difficulties in physical and psychological development, traumatic children, disability children, children without one or both parents, children from social pathological family, refugee's children, withdraw children, children from poverty family, by one word children from vulnerable group (Smajkic, 1988:43).

elementary education as a whole is conducted too slowly. There are numerous reasons

for that, of which the main reasons are as follows: -

asymmetrical nature of management in the education (in Federation of BiH

education is decentralized, while in Republic of Srpska it is centralized)[6]

- the absence of consistent education policy and accountability

- lack of financial resources

- resistance to changes

With the consensus of all education authorities in BiH, the goals of the education

reform have been stated in numerous documents. The key document is the Education

Reform-a Message to the Citizens of BiH (2002).[7] One of the five pledges refers to:

> *We will ensure that all children have access to quality education, in integrated multicultura*
> *schools, that is free from political, religious, cultural and other bias and discrimination and*
> *which respects the rights of all children. (p.10)*

The International Community supports the conducting of the process of education

reform through various projects towards inclusive multicultural[8]education which

promote principles such as: access, availability, acceptability, effectiveness and

official recognition, non discrimination and absence of segregation in education

(OSCE, 2005). As one of the big steps of this reform, the Parliament of the Federation

of BiH, adopted the Overall Law on Elementary and Secondary Education in the

Federation of Bosnia and Herzegovina (Official gazette of Federation of Bosnia and

Herzegovina, 18/2003). According to the Article 59 of this Law, all laws in both

Entities, the Cantons and in Br•ko District should be coordinated with this law. Some

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[6] The Federal Ministry functions only as a coordinator for ten different cantonal ministries of education (each canton has its own ministry of education), while Republic of Srpska has a single ministry for the entire Entity. The District of Brcko has its own independent mandate in the area of education.

[7] It defines the goals of the education reform in the form of five pledges and activities that need to be implemented by the year 2010. With the signing of the Pledge by the entity ministers in Brussels, November 2002, a strong encouragement to the reform was given for all the education segments.

[8] The population in BiH consists of a diversity of groups who had inhabited the country for centuries .They had different cultural characteristics, such as different language, different religions and different demographic mobility such as: Bosnian's, Serbian's, Croatian's, Rome's, Albanian's and other minority groups

of the most important changes in this law in regard to the previous law and especially to the education of children with special needs are listed below:

- The general objective of education is to ensure equal possibilities for education regardless of gender, race nationality, social and cultural background, family status, religion, psycho-physical and other personal characteristics (Article 3)

- The extension of the duration of obligatory elementary school from eight to nine years (Article 16),

- Regular classrooms include children with special needs and provide them with individual educational programs in subjects where they are encountering difficulties.

- Children and youth with special needs shall be educated in regular schools according to their individual needs (Article 19). By previous law, it was recommended but not obligated that a child with special needs can be enrolled in a regular class of elementary school, with whom an adjusted curriculum could be performed.

- The school's staff, teachers, pedagogues, psychologists, special educational teachers, speech therapists and directors should go through the obligatory programs of advanced teacher's training, empowering and testing in order to professionally acquire new knowledge and develop further (Article 21).

- According to Article 54 of the Overall Law, pupils have the right to be a constitutive part of the school governing bodies, such as Pupil's Council,[9] and thus participate as active members of the school organization and life. Manner and procedures of establishment and work of the Pupil's Council are determined by school rules. By previous Law, Council of pupils did not exist.

- According to the Article 113, of the School rules, The Pupil's Council involves one pupil (president of class) from each class in the school. Their activities are determined in the Regulations on the work of the Pupil's Council which creates its annual plan of work that becomes part of the Annual school programme.

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9 The pupil's body of management and making decision in the school is the Pupil's Council with the function:
-to promote interests of school in a community the school is situated at
-to represent student's attitudes before the school boards
-to encourage engagement of students in school work
-to inform the school board on its attitudes whenever it considers it necessary, or upon boards request, on every issue related to work and management of school

Some activities of Pupils' Council are related to following: participate in the work of School board, influence on educational curriculum's reforms, making and realization school project activities, preparing pupils for education about actual themes, cooperation with the Teachers' Council, Parents' Council and the local community, contribution to a better quality of classroom organization aiming on working together and help in learning for all pupils in the classroom (Reform of Education in BiH, 2005:166). Therefore, The Primary Education System in BiH started to shift its educational approach from a more traditional oriented one with competitive aspects, to a child- centered with cooperative aspects of teaching and improved quality of education[10]. Furthermore, for today's pupils in the BiH, learning and development into active, responsible, creative and constructive citizens are more favourable where conditions are conducive to attention, playful focus on complex tasks, cooperation and care (Johnsen, 2005). All pupils need to learn together within a cooperative supportive community in order to feel safe enough to take an enhancing motivation for their learning. This is done by helping teachers to create a school and classroom climate where everyone expects to benefit from exchanging experiences with one another (Befring, 2001). Through cooperative experiences in schools, our pupils are on a viable way to meet the needs presented by an increasingly urban, interdependent and multiethnic world of diversity

1.3. Significance of the study

In a typical traditional BiH classroom, the cooperation among children did not exist and pupils had no opportunities to be closer, know each other better and to learn more together. Pupils did not get to better know their peers with some kind of special needs and were not often motivated to become their friends, good classmates-helpers and be active in the common learning. Hence, I asked myself being teacher what do children gain from cooperative learning and under what circumstances? What aspects of

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[10] ("Improving educational standards in the primary school) From 7-th Education forum (Raising Debate, Raising Standards: An Education System that Works for All),Excerpts of Conclusions from 12-15 April mini forums * the full templates can be found on the OSCE Mission to BiH website-www.oscebih.org

cooperative learning among pupils contribute to the children's advances? Gillies, & Ashman, (2003:8) affirm that interpersonal exchanges among students who worked in the different types of small groups increased helping behavior, perceptions of being helpful to others and a sense of being able to manage the classroom demands. Cooperative activities such as play and group projects are ways to stimulate children towards cognitive, social and emotional learning together (Gandini, 1994:69).

In BiH schools, there are some positive examples of teaching in which children have experienced by working in groups[11]. In these classes, children also act as tutors, helping their less competent peers such as pupils with some kind of special needs. How pupils learn from interacting with others may be analyzed in view of the theory of Vygotsky (1978) and it is a key feature of peer-mediated learning. When children work together on group tasks, they often provide information, prompts, reminders and encouragement to other's requests for help or perceived need for help (Gillies & Ashman, 2003:11). It is a very important reason to encourage peer cooperation where each pupil is scaffold by the cooperative learning process in the light of care and positive communication. This application may be seen as a key aspect of a flexible set of relevant methods aiming to reach a new level of individually independent mastery and increased self control of learning process where each pupil is seen (Johnsen, 2005:19). In the current BiH inclusive classroom setting, the cooperative learning situations are good ways to develop a cohesive group, to create a positive climate and foster feelings of mutual respect in order to promote friendship among all pupils. All of the above mentioned represent models for creating schools and classrooms that can meet needs of a new generation of pupils who take responsibility for what and how to learn, as well as how to share what they have learned with others. Hence, students perceive that they can reach their learning goals if and only if the other students in the learning group also reach their goals (Johnson & Johnson, 1989).

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[11] In after war period through Educational Reforms in BiH, there are schools where teachers are encouraged to organize group work in their classroom to meet individual needs, children's creativities, develop their critical thinking, and on this way to surpass traditional educational form of learning –frontal form who was dominant and adjusted to "average" pupil long period before the war.

1.4. Research problem

The main purpose of this study was to investigate how pupils from a purposefully selected primary school in Sarajevo, BiH experienced cooperative learning. The study focused on the following main question:

How *do pupils perceive their experiences from cooperative learning in the class developing towards inclusion?*

The following eight sub questions were adapted according to eight aspects of cooperative learning for the study:

- Which kind of learning activities are the pupils learning cooperatively?
- What does cooperative learning mean for the pupils?
- How do pupils learn cooperatively?
- How do pupils help others in cooperative learning?
- How do pupils receive help from others in cooperative learning?
- What do pupils like with cooperative learning?
- What do pupils dislike with cooperative learning?
- How can cooperative learning be improved from the pupils' point of view?

In this study I aimed to find out perceptions of cooperative learning from all pupils in 4th and 8th grade in a purposefully selected research school. I also aimed to investigate more in depth the opinions of pupils with some kind of special needs as well as fast learners about cooperative learning, about themselves as member of cooperative group and their interactions with others in cooperative learning groups. I wanted to hear the voice of the pupils. Their voices, their perceptions of cooperative learning, as Johnsen (2005:174) emphasizes, becomes an academic construct. Hence, pupils' interpretations of their cooperative experience can be applied in the teaching and learning process and contribute to our further development of the cooperative approach of primary education, as one important aspect in the development of inclusive practices.

1.5. Justification of the study

In a multicultural setting such as BiH, today the diversity is increasing in schools. Our majority schools are arenas of meeting, upbringing, education and interaction between pupils from different ethnic backgrounds, different cultural habits, family backgrounds, attitudes, skills, socio-emotional and intellectual abilities. The teachers and staff must structure the educational and social environment so that pupils can develop their knowledge, skills and attitudes required to interact and to learn in the heterogeneous classroom. Over the last ten years, cooperative learning has become accepted as one of "the best practices" in education which encourage mutual respect and learning among students with varying talents and abilities, languages, racial and ethnic backgrounds (Marr, 1997 in Cohen &Brody &Shevin –Sapon, 2004). This help pupils to break away from the traditional competitive environment in their schooling so that they can experience learning situations in which all classmates have something of value to bring to their learning together. One of the big disadvantages in our traditional competitive education is the isolation and the loss of opportunities to share with peers of learning from one another. Also, in the after war period, unfortunately, in some part of BiH, it still exist some primary schools where pupils from different ethnic groups have not mutual interaction in school environment. This phenomenon is named "two schools under one roof"[12]. Otherwise, cooperation and cooperative learning activities ensure pupils' interaction to thrive in school, learn and develop socially and emotionally and they feel secure and enjoy being in the classroom which depends not only on a positive teacher-student interaction, but also largely on the quality of student-student interaction (Rye, 2001). Positive interaction and communication between pupils is a basic process in cooperative learning mentioned by Pavlovic, (2005) as the key to successful teaching and learning at every level of mastery. The school has to enable an individual to socialize and interact with others and with his or her environment, while at the same time it creates a social atmosphere

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[12] This phenomenon is perhaps the most vivid example of segregations in schools in BiH where pupils different ethnic group and teachers that teach them, have no mutual contact. There are still 54 these school.(OSCE Mission,2005)

and setting that allows pupils to cooperate. The social policy that can be found in the UNESCO (1994) Salamanca's Statement and Framework for Action on Special Needs Education, suggested following:

> *While inclusive schools provide a favorable setting for achieving equal opportunity and full participation, their success requires a concerted effort, not only by teachers and school sta but also by peers, parents, families and volunteers. The reform of social institution is not only a technical task; it depends, above all, upon he conviction, commitment and good will of the individuals who constitute society (p.11)*

Moreover, by my personal working as teacher applying cooperative learning activities among my pupils, I noticed that the children learn that it is possible to work together in a helpful way in order to increase their self concept and happiness in school. In this perspective individual differences are seen as resources rather than problems (Befring, 2001:54).

1.6. Definition of terms

Cooperation as principle of classroom organization is an approach compatible with diverse cultural groups and that exposes all students to a variety of methods for learning (Putnam, 1993). It encourages children to respect and value one another. In a cooperative learning environment, every student has the opportunity to learn more effectively and work together to accomplish shared goals. The cooperation is much more than being physically near other pupils, discussing and sharing materials with others and helping other pupils. It is a context in which students of various abilities and characteristic can support and learn with and from one another (Putnam 1993).
The classroom developing towards inclusion –The principle of suitably adapted education in the inclusive classroom requires a major shift from traditional "teaching all the pupils in the class the same content", to teaching each and everyone in accordance with their individual needs in the joint class setting (Johnsen, 2001:256). It leads to an attitude towards the classroom celebrating that all are different, all can

learn and all meet their individual needs in a welcoming and supporting environment (Befring, 2001; Johnsen, 2001 & UNESCO, 1994).

Pupil's voice - The children's voices may be seen as the stories on which the scientists base their academic plot where causal links and general conclusions are drawn (Engebretsen & Johnsen, 2005:174). In different sectors of today's society the demand is made that we listen to the children's voice and on their individual experiences through their view of development, through their version of reality, we apply findings in the teaching and learning process. The UN Convention on the Rights of the Child, (1989) Article 12, demands a listening of child's voice:

> *"States parties shall assure to the child who is capable of forming his or her own views the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child".*

For researchers and educators the challenge is, therefore, to listen to the voice of the student itself, and from the knowledge gained contribute to the improvement of cooperative learning (Jaavall, 2007).

1.7. Organization of the thesis

-Chapter 1 is related to the most general basic information of BiH and the elementary education in the light of on going educational reform. Further, this chapter describes the purpose and justification of the research field work and a clarification of the key concepts that are important for this study.

-Chapter 2 describes theoretical overview and discussion of theories: Vygotsky's social constructionist theory, Rogoff's socio-cultural theory, Feuerstein's theory of mediated learning and partly Bronfrenbrenner's ecological approach.

-Chapter 3 contains the methodology applied in the study. This chapter deals with the design and approach, methods, instruments, informants, limitation, ethical and validity considerations.

-Chapter 4 contains the analysis and presentation of data gathering during the research process through essays and interviews in order to give a systematic and clear understanding of the study.

-Chapter 5 conducts the discussion of the results of the study in the light of theoretical framework as same as the conclusion and recommendations for further work.

Chapter 2: Theoretical framework

2.1. Introduction

This chapter focuses on the theoretical framework and review of literature related to this study about pupils' perceptions of cooperative learning. The study is grounded on theories which emphasize the role of social interaction in the child's learning and development such as Vygotsky's social constructivist theory (the proximal zone of child's development, 1978), Rogoff's (1990) socio-cultural concept apprenticeship, Feuerstein's theory of mediated learning (1979) and Bronfrenbrenner's ecological approach (1979). The above mentioned theories are in connection with important aspects of cooperation related to peers' interaction, mediation and support. In order to discuss the meaning of cooperation between pupils in a classroom perceived by pupils themselves, the following relevant topics are mentioned: Understanding of the cooperative versus individual learning approach, creativity and cooperative learning activities, cooperative process, communication in cooperative learning and cooperation as supportive learning.

2.2. Vygotsky- social constructivist theory

The social context and interaction in learning is a key feature of a child's development. The social constructivist view of Vygotsky is one of the more prominent theoretical perspectives on how pupils learn from interacting with others (1978). In essence, children learn by assistance and understanding from adults or more capable peers. They mediate cognitive as well as social processes so that the child is able to complete tasks he or she could not do alone.

> " *What the child can do in cooperation today, he or she can do alone tomorrow".*
> *(Vygotsky in Dixon-Krauss 1996:77)*

To describe the interrelationship between the pupils inside and outside the school Vygotsky (1978:86) defines the zone of proximal development (ZPD) as:

> *... The distance between the actual developmental levels as determined by independent problem solving and the level of potential development as determined through problem solving*

under adult guidance or in collaboration with more capable peers.

This refers to the area between a child's present actual level of functioning (what the child does without help or support) and his or her potential performance level (a level at which child can perform with help and guidance). The tools used to reach this goal are interpersonal dialogues or cooperation aiming towards intrapersonal cognitive mastery. In his view, cooperative activity among children promotes growth because children of similar ages are more likely to be operating within one another's proximal zones of development, modeling in the cooperating group behaviors more advanced than those they could perform as individuals. Vygotsky (1978:86) described the influence of cooperative activity on learning as follows; Functions are first formed in the collective in the form of relations among children, and then become mental functions for the individual. When children work together on group tasks, they often provide information, prompts, reminders and encouragement to other's requests for help or perceived need for help (Gillies & Ashman, 2003:11).

It is very important to encourage peer interaction and develop social skills in how they would be capable to give support in learning situations through different socio creative activities. If the interaction with adult or a more capable peer focuses appropriately on the child's zone of proximal development during the process, then achievement can occur (Krauss-Dixon, 1996:79). Thus, the classroom becomes a community of learners with different learning background in which all pupils are engaged in activities where everyone is working towards a common goal.

The contemporary interpretations of Vygotskian theory use concepts of "scaffolding", "apprenticeship" and "guided participation" when referring to how a child learns in the ZPD. According to Rogoff (1990), within socio-cultural theory scaffolding refers to the supportive situations adults create to help children raise current skills and knowledge to a higher level of competence. Using different social tools and being in interactive situations, children achieve a shared understanding with those who serve as their guides and companions through explanation, discussion, joint participation, active observation and arrangement. In an educational setting, peer models are the most important sources of assisted performance, for children and others (Sehic,

Karlsdottir & Gudmundstottir, 2005). Hence, modeling appears as a powerful tool of assisting working with children, including those who have some difficulties. Then, the cognitive activities occur in socially structured situations that involve values about the interpretation and management of social relationships (Rogoff, 1990:61). She defines a notion of apprenticeship[13] as a model for children's cognitive development which provides active learners in a community, who support, challenge and guide a novice to participate in skilled and valued socio cultural activities. Thus, guided participation involves cooperation and shared understanding in routine problem solving activities (Rogoff, 1990:191). In addition, child development involves appropriation of the intellectual tools and skills of the surrounding community through the informal interactions of its members as central to the process of cognitive development.

2.3. Feuerstein's theory of mediated learning

As connected to a child's development and learning, Feuerstein (1979) developed the Theory of Mediated Learning Experience (MLE)[14]. MLE is defined as a quality of interaction between the organism and its environment via a human mediator. This quality is ensured by the intentional act of a human being who mediates the stimuli impinging on the organism. There are two basic ways in which an individual is modified through interaction with his environment. The first one is direct exposure to stimuli (direct contact or exposure to stimuli perceived or experiences through the sensory channels). The second is the process of learning (MLE) which occurs when another person serves as a mediator between the child as a learner and the environment; preparing and reinterpreting the stimuli from environment so that they become meaningful and relevant for the child (Klein, 2001:37). Hence, mediation is an active process consisting of communication. Parents, teachers and peers may

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[13] The apprenticeship model has the value of including more people than a single expert and a single novice; the apprenticeship system often involves a group of novices (peers) who serve as resources for one another in exploring the new domain and aiding and challenging one another. Apprenticeship has been used as a metaphor in language development and has been studied with youth and adults in skill training, academic learning, and career preparation of scientists and artists (Rogoff, 1990:39).

[14] The theory of MLE is part of the theoretical framework of Cognitive Modifiability (Feuerstein, 1979) based on the conceptualization of intelligence as the capacity of an organism to use previous experiences for future learning.

function as mediators and discourse partners in joint teaching and learning processes (Johnsen, 2001:289). However, in good development communication and positive climate the children have roles as mediators among each other.

Peer mediation allows children to effectively learn through cooperation in a positive classroom environment. This method has been proved by educators to benefit both the mediator (more knowledgeable pupil) and the mediated (less knowledgeable learner) academically and socially. The mediator informs the child about the correctness of an issue which evaluates the child's effort and focuses on the processes that lead to success on the mental process that preceded it (Klein, 2001). The stimuli emitted by the environment are transformed by the mediating person (a more skilled pupil) to assist the slower learner to solve the problem. They cognitive explanations could be more near to the ZPD than teachers as mediator. Related to Salom (2006), the quality of instructions from peer may be more effective than from teachers because children use more age-appropriate, meaningful language and may better understand their partner's potential frustrations.

2.4. Bronfrenbrenner's ecological approach

The choice of Bronfrenbrenner's theory in this study is related to the concept of cooperation in activities which affect the children from the interaction which occur between the individual and his or her environment. The child is placed in the centre and surrounded by the immediate and extended environment. Bronfrenbrenner (1979) explained that, a relation develops whenever one person in a setting pays attention to or participate in the activities of the others. He contends that if one member undergoes developmental change the others are also likely to do so. A setting is further explained as a place where people can readily engage in face to face interactions. Bronfrenbenner, (1979) describes the structure of personal relationships which develop when individuals are engaged in joint activities. Engaging in joint activities provides more understanding of each other's differences and similarities and encourage positive acceptance. His concept concerning the state of interpersonal

relations and reflecting on the core relationship, for instance, between slow and fast learner were taken into considerations.

2.5. Understanding the cooperative versus individual learning approach

Pupils can learn in different ways and their results are different and promote more or less learning within academic achievement and interpersonal relationship. In 1981, Johnson and colleagues published the results of a meta-analysis they conducted on 122 studies that examined the effects of cooperative, competitive and individualistic learning on achievement (Gillies, et al. 2003:6). The results showed that cooperation promotes higher achievement and productivity (i.e. encouragement to learn) than interpersonal competition or working individually. They also found that cooperative learning had greater interpersonal attraction among homogeneous student groups, students from different ethnic groups, as well as students with and without some kinds of special needs. Understanding of cooperation in learning and building of classroom cohesion as working together to accomplished shared goals, strives towards pupils' mutual benefit in order to promote their interaction such as assisting, helping, sharing and encouraging each others (Johnson, & Johnson, 1989). Otherwise, the traditional school emphasized an individualistic and competitive learning in which students work against each other to achieve a goal that only one or a few can attain. Students perceive that they can obtain their goals if and only if the other students in the class fail to obtain their goals (Johnson & Johnson, 1989.) **Table 1** presents a comparison of differences between cooperative learning and traditional groups (Putnam, 1993:21).

Table 1: Comparation of cooperative with traditional learning groups

Cooperative learning groups	Traditional learning groups
Positive interdependence	No positive interdependence
Individual accountability	No Individual accountability
Cooperative skills taught directly	No cooperative skill instruction
Shared leadership	Appointed leader
Responsibility	Responsibility for one's own contribution
Teacher observation and feedback	Teacher withdraws from group
Equal opportunity for success	Uniform standard for success
Groups review process and set goals for future	No review or goal setting

Adapted from Johnson, Johnson and Holubec (1990)

Cooperative groups refers to a group of pupils with varying abilities working together to solve a problem or complete a project (*Dixon-Krauss, 1996.79).* In any heterogeneous group of pupils, opportunity appears for a more skilled pupil to assist a pupil who is less academically skilled. Therefore, cooperative groups promote children's acceptance of differences, whether those differences result from ethnic backgrounds difference in learning pace or from disabilities [15] (Johnson & Johnson 1989). In addition, when pupils work together across diverse ethnic and learning background, children often interact with others from their own heterogeneous group as friends in different social settings. Cooperative groups are designed to encourage pupils to support their peers rather than compete against them in activities that facilitate the development of communication and interaction such as reading, writing, talking, listening and operating. Related to this, Ceric & Alic (2005) noted that supportive work through cooperative learning gives pupils an opportunity to develop their individual ability, but at same time, to help and learn from each other. Therefore, pupils should be given the opportunity to work comfortably with children in order to acquire social and cognitive skills. Different cooperative forms should be in function of immediate learning and cooperative interacting even among pupils out of school places (Muminovic, 2000:59). In addition, Muminovic states that learning should not only be used in school; it should be used in all life situations of pupils and even more in their further development.

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[15] Author used the term handicaps, but in this presentation I used disabilities.

2.6. Creativity and cooperative learning activities

Cooperative learning occurs through different learning activities developed by many interactive, educational models such as "Step by Step"[16], "RWCT"[17] "Jigsaw Classroom Project" and "Reggio Emilia Approach". Through cooperative activities, pupils awaken their imagination and their personal creative features.

In Skjørten (2001:240) creativity was defined in the following way:

> Creativity is a process in which an individual as result his or her personal abilities and possibilities and in interaction with his or her environment, will seek towards new and /or original products which are adequate for the situations…
> This product can be of concrete or abstract character.

Creative activities offer the best possible opportunities that pupils experience learning together by implementing their ideas on different ways such as small group projects and play described in Reggio Emilia Approach (Gandini, 1994). Therefore, creativity must be nurtured in an environment where new ideas are encouraged, valued and discussed freely without fear of a judgmental peer or adult. Hence, creative thinking is enhanced as pupils react to questions and solve problems that promote divergent responses among themselves (Krauss-Dixon, 1996:82). Within cooperative activities individuals seek outcomes that are beneficial to themselves and beneficial to all other group members. In order to solve problems or accomplish tasks, pupils operate with concrete and practical as well as with abstract issues. Related to school subjects, many different activities and its goals may be stated in terms of knowledge that will be brought to the pupils by a variety of means (Johnsen, 2001). In addition, Johnsen described that pupils learn cooperatively using different activities in and outside the classroom such as excursions, study visits, field work as well as activities of daily living (ADL) which can also be applied in cooperative learning. At the same time, it

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[16] "Step by Step" is international educational program which realize in 26 countries. It promotes child –centered approach teaching in which each child learn and develop in interaction with others.
[17] RWCT –The Reading and Writing for Critical Thinking are methods designed and adapted for classrooms in order to promote: active inquiry, student-initiating learning, problem solving, critical thinking , cooperative learning, writing and reading progress , alternative assessment (COI-Center for educational initiatives "step by step"-Sarajevo, http://www.coi-stepbystep.ba/engcitanjem.html)

creates individual and joint suitable possibilities for learning, so that the capacity of all pupils is effectively used and nobody is passive. Thereby, it may encourage solidarity and care connected to the joy of joint problem solving (Johnsen, 2001). Thus, the child with special needs may take active part of these activities according their possibilities and interests and interact with her or his peer. Rogoff, (2003:51) mentioned that interaction in the zone of proximal development allow children to participate in activities that would be impossible for them alone, using different tools that themselves must be adopted to the specific activity. Thus, Adalsteinsdottir, (2000) noted that cooperative activity can provide support between peers which refers not the least to pupils that experience learning difficulties. In addition, having a cooperative learning partner may empower the pupils to act by feeling strong, capable and committed to support interrelationships (Pavlovic, 2005).

Play activities in cooperative learning

Through play, pupils can actively and meaningfully gain access to a wide range of scientific activities. Play which is well planned and pleasurable helps children to think, to increase their understanding and to improve their language competence. It allows children to be curious and creative, to explore, investigate materials and to be curious. (Marvin & Stokoe, 2003:19). When these opportunities are combined with planned academic activities through cognitive, social and emotional level, it is not difficult to arouse excitement and interest so that science lessons become motivating and fun. Vygotsky in (Krauss-Dixon, 1996) emphasized the affective and motivational aspects of play where the child's creativity may be fostered.

2.7. The Cooperative process

The cooperation is much more than being physically near other pupils, discussing material with others, helping or sharing materials with others is a context in which students of various abilities and characteristic can support and learn with and from one another (Putnam 1993:16). Being together does not mean always working together. Cooperation can facilitate and can mobilize all pupils together as more active participants in educational process if it is based on five essential elements

(Johnson & Johnson, 1989; Kagan, 1989; Slavin, 1990; Johnson & Holubec, 1993; Milic, S., 2004) as follows: positive interdependence, individual accountability, face to face promotive interaction, interpersonal and small group skills and group processing.

Positive interdependence is successfully structured when group members perceive that they are linked with each other in a way that one cannot succeed unless everyone succeeds. Therefore, group goals and tasks are designed to students in ways that make them believe that each group member's efforts are required and indispensable for group success. Each member has a unique contribution to make joint effort of his or her role or task responsibilities towards more positive relationships and greater psychological health and wellbeing (Johnson, & Johnson, 1989).
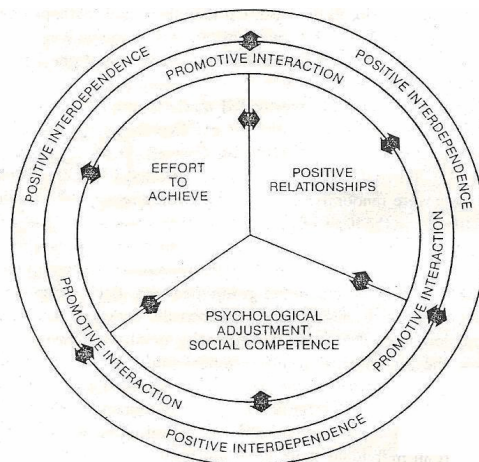
Figure 1: Outcomes of cooperative learning from D.W. Johnson & R.T. Johnson (1989).

It promotes situations in which pupils work together in small groups to maximize the learning of all members, sharing their resources and providing mutual support. Pupils need to develop a unique identity as an individual and a social identity based on their ethnic, cultural and learning background (Johnsen, 2001; Milic, 2004) to respect each other as cooperators and friends.

Individual accountability exists when the performance of each individual pupil is assessed and the results are given back to the group and the individual. It is important that the group knows who needs more assistance, support and encouragement in learning. It is also important that pupils know that they cannot "hitch-hike" on the

work of others. The purpose of cooperative learning groups is to make each member a stronger individual in his or her right. Otherwise, pupil unaccountable in relation with his or her classmates is commonly called a "troublemaker" who does not work effectively in a group or who may even go so far as to sabotage efforts in cooperation (Aroson, E et. al, 1978). Thus, in Jigsaw group, they expedite the learning of pro-social behavior among their less mature and accountable pupils.

Face to face promotive interaction provides that pupils work together in way to promote each other's success by sharing resources, supporting, encouraging and applauding each other's efforts to achievement. There are important cognitive activities and interpersonal dynamics that can only occur when pupils promote each other's learning. This include orally explaining how to solve problems, teaching one's knowledge to others, checking for understanding, discussing concepts being learned and connecting present with past learning. This helps to ensure that cooperative learning groups are both academic (every pupil has someone who is committed to help him or her) and personal support system (every pupil has someone who is committed to helping him or her as a person).

Group skills. Through cooperative activities with their peers, children learn social interaction skills but also improve their cognitive abilities. New roles such as leadership, decision making, trust building and communication need to be practiced. Pupils learn to share, try to solve problems together; they talk about their feelings, encourage each other, cooperate and support each other. Therefore, placing pupils in groups and expecting them to work and to learn together will not necessarily promote cooperative learning. Cooperative skills depend of pupils' training to work together. The training involves not only the children in learning the interpersonal and small group skills that facilitate cooperation, but also ensuring that their teachers understand how to establish cooperative activities in their classroom (Gillies & Ashman, 2003:40). It is also an important benefit for the children, through developing skills, to think about how they feel about themselves and about others (Moyles, 1995:160).

Group processing exists when group members discuss how well they are achieving their goals and maintain their effective working relationships. Groups need to

describe which member actions are helpful or unhelpful, and make decisions about which behaviors to keep or change. Furthermore, exposure in cooperative groups to children with different personalities and backgrounds is enriching in a way that can extend beyond the classroom. A cooperative pupil is challenged to develop empathy and tolerance and must learn how to work effectively toward common goals with person who has different experiences and capabilities (Aroson, E et. al, 1978).

2.8. Communication in cooperative learning

Cooperation can not exist without communication. To manage in cooperation, one needs to develop positive communication among all pupils. Communication is a skill built on knowledge and human sensitivity (Johnsen, 2001:289)

Communication as exchange of thoughts and feelings is the first step of cooperation. Each child has a specific and individual way to communicate. These ways can be either verbal or non-verbal in their social interaction which depends on the quality of their communication. Thus, positive communication skills vary with pupils and the social context can either support or hinder their development of such skills. Communicative skills involve the desire to share and the will to understand others. In regard to the Jigsaw group, it provides the setting and the tools for the children to work together, surpass conflict and learn something about each other. In addition, the quarrelling may appear as a help to make the children learn about how their behavior affects others. One important step for the pupils is to draw up an agreement of rules for communication. List of basic rules for the pupils, which are core values, can be adapted to suit different communication needs of pupils (Wilson, 2004:79).

Active listening

A very important ingredient during the process of learning is active listening[18]. If the pupils are not listening attentively to each other they are not going to be able to learn

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[18] Active listening, as opposed to passive listening (silence), involves interaction with the student, and it also provides the student proof (feedback) of the teacher understands (Gordon in Grossman, H 2004:27).Active listening involves Conscious

what the other pupils are trying to teach (Aronson et. al, 1978:39). In the cooperative classroom like Jigsaw's classroom, the pupils achieved success as a consequence of paying attention to their peers, asking good questions, helping and teaching each other. Such small cooperative groups between two and five children provide possibilities for paying attention, listening to each other, developing curiosity, asking and responding to questions (Gandini, 1994:17). The teacher's role is important to facilitate and to provide an opportunity for pupils to develop listening skills before they can manage in mastery level. Otherwise, a withdraw child or a child with some special needs; have to be encouraged to be an active participant of the group communication. Thus, with positive communication the child can build trust and confidence towards others and him- or herself.

Self –concept

A child's self concept is considered of great importance for social development and learning. This is important for creating good psychological adjustment, personal happiness and effective functioning because it affect how people interpret situations and thereby influences their attitudes and behavior (Berk, & Winsler,1995).A child 's self concept generally consists of all the attitudes, abilities and assumptions that he or she holds concerning him- or herself which act as a guide for behavior. A major source of self-worth is the result of interpersonal interaction with classmates. When pupils are interacting, they are constantly interpreting their own and other's acts and responding (Adalsteinsdottir, 2000). Pupils on this way perceive themselves through other's eyes and cooperative relationships. They are learning to behave by watching, asking, listening and interacting. Pupils who work together needs to receive encouragement and positive feedback from their co-classmates. If they engage in a cooperative rather than a competitive process, it seems likely that the nature of their interaction should increase their abilities to take one another's perspective (Aronson and others 1978:119). Otherwise, many children can be remained vulnerable to

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attempt to hear another person without slotting what he or she is saying into one's own predilections an understandings (Jordan, 1994:44).

developing negative attitudes[19] toward learning and themselves, at risk of coming to believe that they are unable to learn, that they are inferior, that they cannot be protagonists of their own lives (Befring, 2001:60). Otherwise, by achievement and increased self-esteem, through cooperative learning, it appears to create more active learning. It provides opportunities for improving social skills, and fosters greater peer acceptance.

2.9. Cooperation as supportive learning

One of the most important requirements for children to thrive in school, learn and develop socially and emotionally, is that they feel secure and enjoy being in the classroom. It depends, not only of a positive teacher-student interaction, but also largely on the quality of student –student interaction (Rye, 2001). Pupils develop care and support for each other during the cooperative learning. A positive and supportive climate in the classroom is a prerequisite for a quality relationship and academic achievement. It is important to know that pupils need to establish a trustful and secure relationship not only at home but also at school to be able to learn and develop their socio-emotional interactions (Rye & Hundeide, 2003). Today, more positive approaches, such as cooperative learning, recognizes the needs of each individual pupil in the class where pupils, by working together, can create and sustain an encouraged environment for everyone. Peers' environment can help, but in same time hinder the child's adaptation, so it can influence on the child's learning (Babic, 2004). Hence, practicing cooperation in order to facilitate the social and academic achievement, pupils learn that it is possible to work together in a helpful way without failure because of disabilities. This ensures that all children can" flourish", be welcoming in classroom regardless of their individual ability levels, background and learning styles and see each other as support (Befring, 2001; Putnam, 1993). In

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[19] An attitude may be viewed as a positive or negative emotional reaction to a person or object accompanied by specific beliefs that tend to cause its holder to behave in specific ways towards its object (Shapiro, 1990:9). We can learn negative attitudes towards disability from strong social influence as family, media, literature, school. In cooperative inclusive school it is important to shift negative attitudes and improve positive attitudes towards diversity among pupils.

accordance with the Jigsaw classroom the low-achieving children benefit from the high –achieving who are not hampered by the low-achieving ones. In this way care and support is a foundation for pupils' social relations and learning. Thus, social learning through group interaction in which all pupils share their experiences and increase their feelings of others, develops empathy, tolerance as same as ability for cooperation, care and responsibility for both, yourself and others (Ilic,M 2003:116). Thereby, pupils in the different types of small groups have an opportunity to develop their helping behavior and a sense of being able to manage the classroom demands. It produces good friendly relations in the inclusive class and perhaps even more outside the classroom and the school (Johnsen, 2001:294). Thus, the structure to support pupils' learning and participation evolves as pupils gain skills that allow them to assume an increasing responsibility. This transfer of responsibility is jointly achieved by pupils (Rogoff, 1999).

2.9.1. Learning based on friendship relationships

Establishment of friendship in social interaction is important contributions towards an inclusive classroom. The social peer competence[20] and friendships did not often spontaneously emerge when children with some special needs were simply placed in a setting with their peers. Thereby, it was a main barrier that slow learners could often experience difficulties in socially interacting with their peers. Poor peer group acceptance may foster negative feelings towards school and the schooling experience, and may result in children withdrawing from both academic and social learning situations (Juvonen, J.& Wentzel, R. Kathryn (1996:206). It means that as friends, pupils can express more emotion and loyalty towards each others, see each other more frequently, and they can cooperate more than mere acquaintances do. To help pupils to build a friendship by cooperation, it makes them aware of importance of care for

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[20] Social competence is ability to achieve personal goals in social interaction while simultaneously maintaining positive relationship with others over time and across situations (Rubin & Rose –Krasnor, 1992 :285 in Kemple Mary Kristen 2004:3)

one another. Henning Rye in ICDP[21] emphasizes the eight principles to improve student-student interaction for mutual empathy, adjustment, acceptance as the main prerequisites for cooperation. It gave stimulus to interact with peers and stimulus in learning. Through friendship, every child has a sense of belonging and be respected for his or her "differences" (Kemple, 2004).

2.10. Summary

All of the discussed theories and previous researches focus on the importance of cooperative learning and positive mediated interaction for the academic and socio-emotional development of children. Positive pupil – pupil interaction was considered in the light of the scaffolding issue in order to meet the purpose of this research. The discussed pupils' cooperation is in relation to findings described in chapter 4 aiming towards academic and socio-emotional benefits and needs for pupils with some kind of special needs and their more capable peers.

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[21] ICDP International Child Development Programmes

Chapter 3: Methodology and Procedures of Research

3.1. Introduction

This chapter described and discusses the methodology used in this research through the process of research preparation, collecting data, analysis and interpretation of findings. I describe the applied qualitative research methods where the main one is the essay method supplemented with individual interviews. The aim is to investigate and gain information about how pupils in a one purposefully selected regular school in Sarajevo, BiH perceive cooperative learning. The selected informant groups are all pupils in one 4th grade and one 8th grade class. In order to get in depth information about how they perceive cooperative learning they are given the assignment to write an essay about cooperative learning relating their text to eight aspects of cooperative learning. Prevalence of the different categorized qualitative essay answers to the eight aspects is described quantitatively in charts. In order to gain more qualitative information about same main topic, but form another angle, a semi structured interview is administrated with two selected pupils from each of the classes and in addition two pupils from another 8th class in another school. Of these informants, one in each of those classes is fast learner and one in each class has some kind of special needs. Therefore, the following methodological aspects are described and discussed in this chapter: research design, selection of case school, sample, methods and instruments of data collection, process of analyses, validity and ethical aspect of the study.

3.2 Research approach and design

In order to find out how pupils perceive their experiences of cooperative learning, this study required mainly a qualitative approach based on the essay as the main approach with interviews according to Gall, Gall & Borg (2003):

> *Qualitative research is multimethod in its focus, involving an interpretive, naturalistic approach*

to its subject matter. This means that qualitative researchers study things in their natura settings, attempting to make sense of, or interpret phenomena in terms of the meanings people bring to them.

The phenomenon in focus of this study is cooperative learning experienced by the pupils. The qualitative research produces descriptive data, which can be collected in a variety of ways (Befring 2004). By using qualitative multimethod, essay and individual interview, my task was to explore the phenomenon as informants view it. This aspect is related to the emic perspective where the researcher obtains participants' viewpoints from different angels as in this study through pupils' essay and interviews (Gall, Gall& Borg 2003:438). The main distinctive feature of this qualitative approach is that it employs written words and free forms of expressions, which are also presented in simple quantitative forms. Thus, the numbers of pupils' expressions per subcategories are also presented as a quantitative part of this study. The reason for choosing an essay design is to gather opinions of pupils having similar and different values and expectations based more on concrete experiences than on objective registration, (Befring, 2004). Through what pupils may say and write gives us their personal experience which is essential for understanding their participation in cooperative learning and how it supports an inclusive learning process. Thus, a study that attempts to uncover the nature of persons' experiences with social phenomenon naturally lends itself to qualitative types of research (Strauss &Corbin 1990:19).

The following figure gives an illustration of the research pattern that was followed during the study**:**
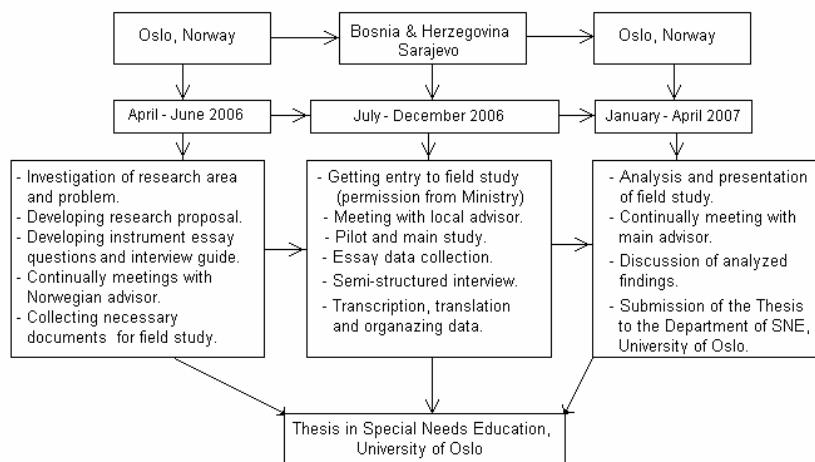
Figure 2: Research Design

Since the study is largely qualitative in nature this will also influence the choice of methods and procedures for data collection and these are described below.

3.3. Sampling

A purposeful sampling was used to select the main research school and classes.

> *The purposeful selection of participants represents a key decision point in a qualitative study. Researchers designing qualitative studies need clear criteria in mind and need to provide rationales for their decisions (Creswell, 1989:118).*

The main research school has a population of around 690 pupils. The sample of two classes, both 4th and 8th grade, was purposefully selected. The main criterias for choosing these classes were that they had at least one pupil with special needs and that these classes have practiced cooperative learning. Another school was included as an additional source for collection of interview data. The 8th grade was purposefully selected in this additional school as the first example of a class in a regular school where a pupil who is intellectually challenged and diagnosed with trisomy 12, learns together with her classmates.

 Purposefully selected school as the main arena of this study was chosen for the following reasons:

- its participations in earlier educational project, it practices a positive example of school towards inclusion; it developed a model of cooperation on three levels during the reform's process of primary education in BiH in after the war period (OSCE Mission, 2005):

  1) Cooperation of the school with local community and wider;
  2) Cooperation among teaching staff, other staff and parents in the school;
  3) Cooperation among the pupils in the classroom;

- Selected of Pedagoska Akademija of University of Sarajevo as case school in the project SØE 02/06 (2002) *Institutional Competence Building and Cooperation with Two Bosnian Universities: Special Needs Education towards Inclusion".* The Cooperation Programme with South-East Europe(CPSEE) 2002-2004 between Universities Sarajevo, Tuzla and Oslo.

- This is the third Master study in this same school as addition information to improve teaching and learning practice towards inclusion
- I have six years working experience in this school and was part of the school staff during the educational reform sharing knowledge about the development and practices of the cooperation
- Cooperative learning practices has been developing in the classrooms

This school is located in a very economical less privileged part of Sarajevo. Many of the pupils' families are incomplete and deal with very hard social economic situations In comparison to other parts of Sarajevo, this is an area with multicultural diversity where Roma inhabitants and minority groups from Sandzak (part of Serbia) are part of the total population[22]. This diverse structure of inhabitants was an interesting reason to focus on this school, which developed a cooperative model of teaching and learning

Selection of classes. The reasons for choosing, both 4th and 8th grade in this case school were: age, learning experiences from cooperative learning and that the classroom has at least one child with some kinds of special needs. For the essay writing one 4th and one 8th grade class was selected (see table no.2).

Table 2: Sample procedure

	Essay data collection	Interview data collection
Case Primary School	**1 class from 4th grade** 10 girls + 13 boys 23 pupils	1 Pupil Special Need (Boy)
		1 Pupil Strong Academic Ability (Boy)
	1 class from 8th grade 9 girls + 12 boys 21 pupils	1 Pupil Special Need (Girl)
		1 Pupil Strong Academic Ability (Boy)
Additional Primary School		1 Pupil Special Need (Girl)
		1 Pupil Strong Academic Ability (Girl)

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[22] The population in BiH consists of a diversity of groups who have inhabited the country for centuries. They have different cultural characteristics, such as more or less different language traits, different religions and different demographic mobility. The three main groups are: Bosnian's, Serbian's, Croatian's and in addition there are smaller groups such as Rome's, Albanian's, Sandzak's and other minority groups

The 4th grade had 23 pupils and 8th grade had 21 pupils. The total number of pupils in these two selected classes in the regular research school was 44. Two selected classes, from the main research school, were invited to participate in an essay data collection about cooperative learning to express their opinions freely based on their own experiences. During the data collection from these two classes, I let the pupils keep their anonymity and let them use their code and gender. According to Gall, Gall & Borg (2003:227) this method is not completely anonymous, because I could link the essay questions (which had code on it) to the individuals' name and find out who did not return or complete their essay sheet. However, I completed all pupils' essays. As shown in the table 1. above, from both 4th and 8th grade, were chosen two pupils per class, purposefully selected for individual interview. In order to get depth information about cooperative learning, I selected one fast learner and pupil who has some kind of special needs of each class. In addition to this, I have in another school one pupil who has significantly lower level of mastery than all other pupils in her regular class and her classmate, a pupil who is a fast learner. The purposefully sampling had goal to select the pupils that are likely to be "information rich" with respect to the purposes of this study (Gall, Gall and Borg 2003:165). The selection of these pupils helped me to get in depth and additional information about cooperative learning given in another media then essay writings. Especially, this selection is important for pupils with special needs who had difficulties with writing and could not, therefore, express themselves by writing essay data. Thus, through the interviews they stated many things about cooperative learning orally and some specific notions that were not mentioned in the essay data. The background information about pupils with special needs and strong academic abilities is explained later in chapter 4.3.1.

3.4. Data collection methods

The data was collected by using multiple methods consisted of essay method and semi-structured interview and also document analysis in additions to grasp contextual aspects of my study. Although the main method here used was essay individually

applied in the class, in order to grasp the pupils' perceptions in depth I used the interview conducted of few purposefully selected pupils. Robson (2000:188) points out "Selecting a method or methods is based on what kind of information is sought, from whom and under what circumstances". It helped me to gather information about cooperative learning from another angle applying different media and source of data.

3.4.1. Essay as method

Essay writing is not new forms of data have emerged such as narrative story writing.[23] It uses a text form, not used so much in previous studies, to study the problem that includes entering the field of perception of participants; seeing how they experience and display the phenomenon; and looking for the meaning of the participant's experiences (Creswell, 1998:31). Reite's (2005) essay approach in her Master study "To learn and to be" became a model for my research approach. Through essay type questions, the pupils' experience of their cooperative learning was collected in this written form. The eight main arenas that the essay method covers are related to:

- The pupils' perceptions of cooperative learning task
- The pupils' perceptions of meaning with cooperative learning
- The pupils' perceptions of cooperative learning process
- The pupils' perceptions of their likes with cooperative learning
- The pupils' perceptions of their dislikes with cooperative learning
- The pupils' perceptions of their help to others with cooperative learning
- The pupils' perceptions of receiving help from others with cooperative learning
- The pupils' perception of improvement of cooperative learning

The selection of these eight aspects is made in accordance with the main research questions (see chapter 1) and also based on the knowledge from the theoretical literature related to the aim of study and from my previous experience working with pupils in the school. According to the essay method in qualitative research, Befring (2004:76) stated:

"*Qualitative method often aims at defining and understanding specific circumstances from an*

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[23] Helga Eng, first professor and doctor of philosophy of Department of Educational Research at the University of Oslo(1936), today The university's Faculty of Education named "Helga Engs Hus", based her studies on diaries and children's drawings(Befring,2004).

overall perspective. To a large extent, qualitative research is geared toward an intensive depth orientation, with an emphasis on clarifying the meaning and development of fruitful concepts, and perhaps characteristic typologies as well".

Thus, the eight main arenas serve to focus and the attention to pupils towards important and relevant aspects of cooperative learning. It helped me to gain a joint overview of pupils' answers of cooperative learning developing different subcategories into each main arena.

Essay instrument. In this study, I developed and used eight open ended questions (essay assignment) (see appendix no.1) as the main mode of data collection from the pupils. Open form means that respondents can make any response they wish (similar to an essay question) (Gall, Gall & Borg, 2003). Through essay, the pupils freely wrote and showed that it is possible to get a true expression from personal experience which is essential in this study for understanding the cooperative learning process and its enriched perspective. The pupils, from both 4th and 8th grade, were invited to write essay by hand after I gave them instructions and explained the title "The Cooperative learning and its important properties", essay questions, aim and time framework for writing. The pupils had one and a half hour to write their essay. In advance, I prepared and printed out essay questions for them and they were answered on separate sheet. During the pupils' writing, I was attending in the classroom and teachers were out of the classroom. The developing of questions was related to the eight main arenas already mentioned in this chapter. After having decided on the research question, design and investigation of theory, preparation of essay questions was a big challenge. Going through previous studies helped me in focusing and organizing the concept of essay questions. I went through similar work being done by Reite, (2005) in a Norwegian Master Thesis "Å lære og å være".[24] I discussed a lot with my classroom colleagues and my main Norwegian advisor before I developed the final questions. I also received good help by discussing with a previous Norwegian Master student Ingrid Chr. Reite and I got helpful comments.

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[24] Translation from Norwegian language to English; "To learn and to be"

3.4.2. Semi –structured interview

Since the purpose of interviewing is to elicit views and opinions from the participants (Creswell 2003), the interview method was found to be appropriate as another method of data gathering. A face to face interview method used to have a good follow up of pupils' answers to obtain more information and find out specific statements of cooperative learning. This view is emphasized by Kvale (1996:105) who says that:

> *"Interviews are particularly suited for studying people's understanding of the meanings in their lived world, describing their experiences and understanding and clarifying and elaborating their own perspective on their lived world".*

He adds that, an interview is an interpersonal situation, a conversation about a theme of mutual understanding. In order to answer the basic questions of the study especially through pupils' perceptions of cooperative learning, about themselves as member of cooperative group and about their interactions with others in cooperative learning group, an open -ended semi structured interview were formulated.

Recording the interview. An mp3 recorder was used to record the interviews to not lose valuable information, which might be important in understanding the cooperative learning. A tape recording provides a complete verbal record, and it can be studied much more thoroughly than data in the form of interview notes. Recording also reduces the tendency of interviews to make an unconscious selection of data favoring their biases (Gall, Gall& Borg 2003:249). In my case, the use of the mp3 recorder helped me to be more attentive to the interviewee. It gave me an opportunity to capture the mood of the interviewee and create a comfortable atmosphere. The study used an interview protocol for recording information in the course of preparing the interview guide.

Interview guide. In order to obtain additional data in depth through interview, I had to design the interview guide for the selected pupils with some kind special needs and strong academic abilities (see appendix no 2). I organized them according to eight essay questions divided into three main categories:

-pupils' perceptions of cooperative learning
-pupils' perception about themselves as members of cooperative group
-pupils' perception about their interactions with others in cooperative learning group

During the interview, three additional questions appeared and they were added as part of the interview guide. The interview guide for Sana (PRSN3-8), a pupil with intellectually challenge and diagnosed with trisomy 12, was adapted and fit her level of understanding (see appendix no 3). It was not possible to interview her with the same structure of questions which was used for the other informants. Thus, her teacher adapted all questions to a more concrete level, but keeping the main meaning of each question. In my presence, her teacher conducts the interview with Sana. The girl developed a very familiar relationship with me. After my first visit to her school, she accepted me as someone who can be her friend. Thus, my presence did not disturb the interviewing process.

3.4.3. Document analysis

Document analysis is a suitable additional method related to national and international conceptual aspects of this study. Relevant documents were used to review background information and to supplement some parts about selected school and pupils in more specially details. The various documents were got from relevant government and non government institutions, libraries, resources persons, parents and teachers. The most important use of documents is to corroborate and argument evidence from other sources (Yin, 1994).

3.5. Procedure of the study

Essay questions and the interview guide were prepared at the initial phase of study at the same time as the research proposal. Translating these instruments into Bosnian language was also done.

3.5.1. Permission to conduct the research

The first step in order to conduct the field part of research was to gain access. In connection with this Gall et al. (2003) stated that identifying appropriate study area and contacting relevant people and authorities to obtain the necessary permission

were critical steps in research. The application for permission to carry out the research was addressed to the Ministry of Education early of July, attached with an introductory letter from the Department of Special Needs Education (see appendix n 4). Although, the permission was late and obtained in October, 2006(see appendix 5.) I made lot preparations for research in the selected research school, such as meeting with headmaster, teachers and parents. I did not have any problems to gain entry to the research school before I got permission from Ministry of Education because the headmaster had understanding for this. Thus, in August I present the research project and its objectives to the headmaster and the teachers whose classes were included in this research. After I got permission from the Ministry of Education in October 2006, I also met headmaster, pedagogue and teacher in another school. They let me gain access to make interview with the earlier mentioned pupil with trisomy 12 and her classmate.

3.5.2. Pilot study

Pilot study was conducted during September 2006, in a neighboring school. The aim was to evaluate the effectiveness and validity of the instruments and the procedures to follow while conducting the main study. After the piloting procedures and discussion with teachers, local advisor and my Norwegian advisor, I made following corrections in the essay instrument:

- The term "cooperative learning" was changed to term "learning together" as more concrete and acceptable for pupils

- The number of essay questions was increased from six to eight questions. For example; question about help and receiving help existed as one question divided in part a) and part b). This made the questions more   confusing to answer, especially for pupils in 4th grade.

- Question about likes and dislikes was changed according to the same principle explained above

The interview guide was pre-tested with two pupils from the same neighboring school. This gave me the experience in how to ask questions and listen to the

interviewees. It was very useful to see how the interview was going with the pupil with special needs. After the pre-test I had to amend some questions into the guide while most of them were left unchanged because questions had proved to be clear and could get me the required information. During the piloting, three questions appeared spontaneously and they were included in the main study as important information. The pilot test showed that the interview guide was inadequate for the intellectually challenged pupil who was diagnosed with trisomy 12 as above mentioned earlier.

3.6. Conducting the main study

After I was satisfied with the modifications of the instruments as explained above, I proceeded to the main study. I visited the selected research school many times and had the "privilege" to be familiar as its employee. The essay instrument was translated to Bosnian language and for this I engaged a professor of English language to ensure validity. Essay data was collected at the end of October of the 2006 /2007 school year. Before, the pupils started to answer the essay questions; I introduced the research that I was doing and its aim. I briefed them about how confidentiality will be maintained. I invited them to write as freely, open and serious as possible. After explaining them that this research will be important, useful and helpful for other pupils in the future, I felt that it increased their interest for this work. I also requested them not to discuss with their classmates, but to give their own perceptions. It was interesting to observe that some pupils from 4th grade who finished earlier wanted to draw their learning together (see appendix 6). The interviews with the slow and fast learners were conducted in November and December school year 2006/2007 in order to avoid the biases. I had two reasons for waiting and doing it afterwards. The first reason is to avoid that they reveal the questions and what answers they gave to others, and on this way affect rest of the answers. The Second reason was to give them some time to "forget" what they wrote in the essay. Before starting interviews, pupils were informed about the purpose of the study and interview. In addition to this, for the purpose of ethical consideration, they were informed that no harm will come to them as a result of their participation in the study. They had rights to refuse to answer or

add some questions. Furthermore, pupils were informed that they would be given pseudo names in the presentation and discussion of the results from the study. It was a big challenge to interview the pupil diagnosed with trisomy 12 in the additional school. Her teacher helped me to correct, adapt and conduct the interview with her. Before we started the interview, I let her to know me better and develop a familiar relationship. For the other informants, in order to make the communication more effective, to make them relaxed and establish a good atmosphere, I engaged them for some minutes talking about general thing before the formal interview began.

3.6.1. Organization, data analysis and presentation

After essay data was collected, I used the strategy to organize and present my data by essence [25] of qualitatively and simply quantitatively (presentation of the number of pupils' expression per subcategories in the 4th and 8th grade and related to gender). Qualitative data are examined through working inductively from particulars to more general perspective, whether these perspectives are called themes, dimensions, codes or categories (Creswell, 1998:20). Because of the large sample of informants (44 pupils), it was problematic to combine single themes to single persons. The process of analysis was related to category and subcategories so that similar data give similar conceptual labels (Strauss & Corbin 1990:29). Through reading all essays, I pulled out inductively category by category and located them to the relevant one of the eight arenas. This is accordance with interpretational data analysis which consists of developing a set of categories that adequately encompass and summarize the data (Gall, Gall &Borg 2003). Thus, I had to decide what was worth taking note of in each segment of the database. I operated with the eight main arenas (structured by eight essay research questions) as my starting point in the categorization. Through examination of the data from each research question I was able to develop subcategories within each arena. Hence, all the answers that were similar were

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[25] The essence of qualitative data analysis of any type is the development of a typology of categories or themes that summarize a mass of narrative data (Tashakkori & Teddlie, 1998:119).

grouped by subcategories in each of the eight arenas. Therefore, the first part of data presentation, called overview analyses was related to eight main arenas. "Distribution of answers" with schematic overview over number of expressions in subcategories related to pupils' ages and gender were presented quantitatively under each arena as prevalence. It is followed by creating displays of information such as diagrams or graphs –means for visualization the information and representing it by theme (Creswell, 1998:140). The second part of qualitative analysis specifically on the three pupils' views of fast and slow learners through the interview data. It starts with a short general introduction related to the similarities supported by the findings of essays. Subcategories and sub, sub categories in this part have been first transcribed in Bosnian then in English language. I compared it to the essay description, presentation, cut out everything already mentioned and summed up. Because of the large data material, it was necessary to find a way to systematize the content of the data. I had an intention to use the computer program NUDIST 6[26] to sort data and make it easier for seeking all answers. However," manual" categorization became the chosen practice.

3.6.2. Limitation of the study

Throughout the process of carrying out the study I faced a few obstacles which are mentioned here:

- My permission of the Ministry of Education was late for unknown reasons but it did not affect process of my study

- Although I requested the pupils not to discuss with each others while writing their essay, some of them tried to do it

- I did not conduct the interview with the intellectually challenged pupil because I supposed that one of the former teachers would be better fit to do it

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[26] NUDIST (non-numerical unstructured data indexing, searching and theorizing developed by Richards and Richards ,1998) helps in grounded theory oriented research starting from developing codes from empirical material, i.e. texts in : formatting textual data, coding data with open coding, writing memos and attaching them to text segments, comparing text segments to which the same codes have been attached , integrating codes and attaching memos to codes, developing a core category (Flick, Uwe, 2002:259).

3.7. Ethical issues

When employing human subjects in research, we must respect their rights, dignity, privacy and sensitivities. Ten aspects of researchers' obligations to subjects are identified in the AERA[27] proposed standards (Ary, D. et al., 2002:504). Regarding to the ethical issues in my study, I have considered the following:

- Secure permission from the concerned office in Ministry of Education

- Secure informal consent from the school principal and teachers for conducting of the research

- Obtain permission to interview and describe the pupils with special needs from the children's parents

- Secure of the main research school, additional school and participants' names through changing names in this presentation

- Making sure that the participants knew the objective of the study

- Encourage the informants to feel free to express themselves by telling them not to write their names on the essay answers and letting them write it in the absence of their teachers

- The interview were done in places where there were no other persons

3.8. Validity

Validity is about the interpreters and its actions in relation to the data material and about reflections and theoretical basis. The question of validity can be summarized as a question of whether the research sees what he or she thinks, he or she sees (Kirk & Miller 1986:21 in Flick 2002:223). Basically, three errors may occur: 1) to see a relation, a principle etc. where they are not correct; 2) to reject them where they are

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[27] American Educational Research Association, (1992).Ethical standards of the AERA. *Educational Researcher,*(p.24)

indeed correct; and 3) to ask the wrong question. A basic problem in assessing the validity of qualitative research is how to specify the link between the relations that are studied and the version of them provided by the researcher. Creswell (1998) argues that validation or verification is a process that goes on throughout data collection, analysis and report writing of a study, and standards as a criteria imposed by the researcher and others after a study is completed. During the study, I attempted to ensure validity of the obtained data through the following procedures:

- Theory triangulation (Vygotsky's social constructivist theory –the proximal zone of child's development, 1978; Feuerstein 's theory of mediated learning ,1979; Rogoff 's apprenticeship ,1990;2003 and Bronfrenbrenner's ecological approach,1979) was followed to add a perspective to the investigation in different angles

- Use of two data collection methods and additional document analysis to increase the validity of the study using different source of information to see if the findings could be really reflecting phenomenon in the study

- Use of interview protocol for the interview data recording process in order to keep and not lose valuable information

- The interviews were conducted after the essay data collection to avoid biases which can affect pupils to answer in same way

- I piloted the essay questions and the interview guide to see if they were designed in a way that could help me to extract the desired kind of information

- I engaged a professor of English language to translate my instruments to Bosnian language

- I gave the pupils enough time to express their views and followed their responses with utmost attention and interest

Chapter 4: Analysis and presentation of data

4.1. Introduction

This chapter contains the analysis and presentation of the data divided into two parts according to the type of data collection used and its presentation. The first part is composed of the pupils' essay data collected in both 4th and 8th grade from the selected research school (44 pupils). This part is targeting to answer the main question regarding the pupils' perceptions of cooperative learning in the classroom towards inclusion. It comprises eight main arenas into cooperative learning. Each arena is a starting point by the pupils' answers divided into subcategories with quantitatively part as prevalence of essay answers. The second part contains interview data carried out with three pupils with special needs and three pupils with strong academic abilities. This part is targeting to grasp pupils' perception of cooperative learning, about themselves as member of cooperative group and about their interactions with others in a cooperative learning group from another angle giving new aspects more in depth.

4.2. Presentation of essay data

The essay material was the product of the main data gathering instrument of this study which is described in chapter 3. The essay method was conducted with 44 pupils in the selected regular research school. From the 4th grade I collected 23 essays (10 girls and 13 boys) and from the 8th grade 21 essays (9 girls and 12 boys).The essay data were analyzed and presented according to 8 main arenas. Each arena was intended to function as a starting point in the pupils' answers about aspects of cooperative learning. Their answers within each arena have been divided into subcategories as an attempt to clarify pupils' views of their experience with cooperative learning in classrooms towards inclusion. All arenas were visualized through an overview of subcategories displayed as tables (see appendices no.7 for each arena). Each arena

starts with the quantitative presentation of prevalence of answers in which the summaries of subcategories are displayed by graphs and compared related to 4th and 8th grade.

4.2.1. Arena "Cooperative learning tasks"

The first essay question was "In what kind of learning tasks are you learning together in pair or group with your classmates?" The pupils gave a number of different answers which have been divided in following subcategories: school subjects, activities, innovative learning techniques, teaching and learning aids and out of school learning.
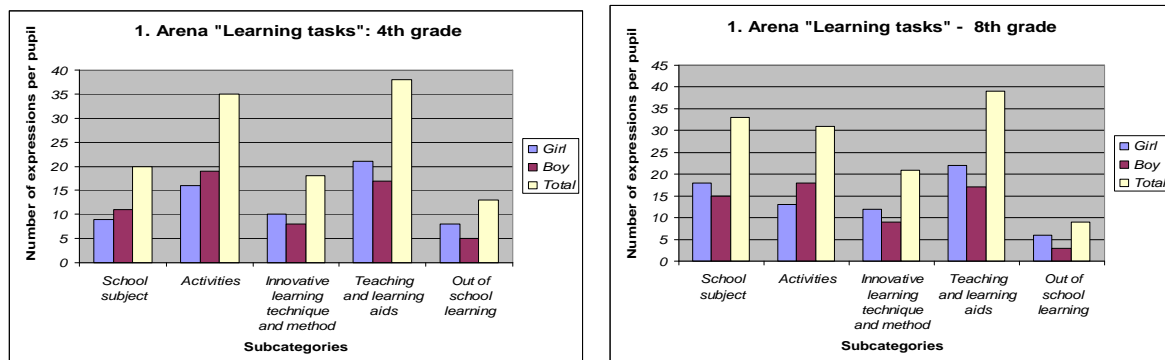
Graphs 1: The expressions distributed to the subcategories in arena "The cooperative learning tasks"

The number of the pupils' expressions to these subcategories is almost equal for both 4th and 8th grade. The "teaching and learning aids" used in the cooperative learning tasks presents the most frequent subcategory mentioned in both 4th (38 expressions) and 8th (39 expressions) grade. According to 18 exp. in 4th grade and 21 exp. in 8th grade, "the innovative techniques" were very often used in cooperative learning tasks. The pupils in both 4th (13 exp.) and 8th (9 exp.) wrote about cooperative learning tasks out of school although they were not asked for cooperative tasks out of class. In 4th grade the girls gave more expressions for the three last subcategories than boys. However, the subcategories "school subject" and "activities" were mentioned more frequently by the boys. In 8th grade, the girls mentioned more aspects than boys in all subcategories except "activities".

School subjects as subcategory include all subjects in which pupils from both 4th and 8th grade mentioned that they learn together through different learning activities and creative situations. Bosnian language is the most frequent subject emphasized by both genders in the 4th and 8th grade and cooperative tasks appears in the field of literature school reading and grammar. As an example when they are analyzing a new story or poem their teacher divides them in groups and the first group has to analyze figures and their traits, the second group works with the main plot of the story, the third group is seeking for main message from the story and the fourth group is drawing the story. The pupils in 4th grade do together a lot of practical works with different natural materials in the subject Nature and Society which gives them more opportunity to work interesting and creatively. Preparing some thematic presentation or paper is a situation where they feel that they learn more together than alone. In addition, the pupils in 8th grade described that History and Geography offer them different creative possibilities for learning together preparing thematic presentations on CD and visiting different places outside school.[28] They wrote that they have opportunity to be in cooperative activities periodically when they have specific common task as for example working on experiments into subject Chemistry.

Activities. Pupils in both grades described cooperation within learning activities that are categorized here as practical, intellectual or creative activities. Cooperation in practical activities varies related to level of age from what might be described as simple activities in 4th grade to complex activities in 8th grade.

The pupils from 4th grade work more together in practical activities when they draw cut materials or paste it on a joint paper. Practice and repetition of knowledge and examining each other in groups are placed in the subcategory intellectual activities. Under creative activities are placed group presentations, story working with books and relief models. Cooperation in these activities was practiced more in 4th grade than in 8th because the class is organized so that they are placed in the groups and face each other. "We are learning in the group almost in each lesson because we are

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[28] According to the National Curiculum in BiH , pupils have a certain amounts of school hours for study visits related to

sitting in this way" (pupil 9.bIV).[29] For pupils in 8th grade, intellectual activities contain more project work and investigations of target themes. Related to practical activities they mentioned that in Technical subjects they have made together models of house, air balloon and they have folded an air-condition. In the subcategory creative activities is placed cooperation in making documentary film, CD thematic presentation and herbarium.

Innovative learning techniques – methods. The pupils from both 4th and 8th grade wrote about RWCT techniques[30] which give them opportunity to learn "in amusing ways. These techniques appear mostly in the subjects: Bosnian language and Nature and Society in 4th grade and in 8th grade in Bosnian language, Physics and Geography. The KWL [31] – table is an innovative technique often used in school subjects and mentioned by pupils in both 4th and 8th grade.

Teaching and learning aids were mentioned in situations where pupils learn together through different cooperative activities in order to facilitate their accomplishment of common tasks. The pupils from 4th grade described specific natural materials for manipulating and making interesting things in creative activities while the pupils from 8th grade emphasized working together by computers, video machine and internet when they are preparing their group thematic presentation.

Outside school learning. The pupils' essay, both in 4th and 8th grade, gave different examples of how learning together continues in out of school environment both at home and other interesting places. A lot of joint learning activities were mentioned in places such as other institutions than the school and in nature when they collected more knowledge and information for their group work. It is specific for pupils in 4th

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school subjects.

[29] Abbreviations are used to refer to direct quotation of pupil's statement; for example: 9 is number of pupil, b is gender (boy), IV is grade fourth.

[30] RWCT –"Reading and Writing for Critical Thinking" are methods designed and adapted for classrooms in order to promote: active inquiry, student-initiating learning, problem solving, critical thinking , cooperative learning, writing and reading progress , alternative assessment (COI-Center for educational initiatives "step by step"-Sarajevo, http://www.coi-stepbystep.ba/engcitanjem.html)

[31] The KWL model (Ogle, 1986) is a strategy that begins with discussing and listing what the students *know* about the topic and predicting what they *want* to learn about it. After the text is read, students recall information read by listing what they *learned* from their reading (Dixon-Krauss, 1996:55)

grade that they described their parents as helpers to prepare their "presentations in Nature and Society" (pupil 11.g.IV).

4.2.2. Arena "The meaning of cooperative learning"

Different answers have been extracted from pupils' essays about "what does mean cooperative learning for them" which can be related to the following subcategories: knowledge, group learning process, friendship and feelings.
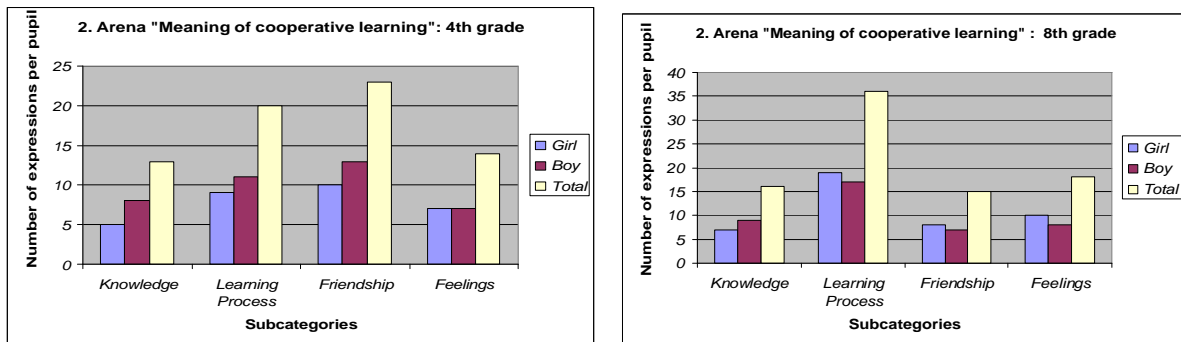
Graph2: The expressions distributed to the subcategories in arena" Meaning of cooperative learning"

For pupils in 4th grade, "friendship" is the most important aspect (23 exp.) giving to cooperative learning subcategory while for pupils in 8th grade it is" the learning process" (36 exp.) which presents a more distinct difference than the other aspects. For pupils in 8th grade, "feelings" (18 exp.) are more meaningful in cooperative learning than for pupils in 4th grade (14 exp.).Generally, boys expressed more than girls in 4th grade in this arena, but the subcategory "feelings" have the same number of expressions. The girls wrote more than boys in 8th grade in all subcategories except "knowledge".

Knowledge. For the pupils in both 4th and 8th grade, cooperative learning means a better way to acquire more knowledge than alone. In addition, they wrote that it helps them to implement new knowledge in different creative activities. For pupils in 8th grade, it also means to discover new things from each other and grasp new knowledge. "Learning in the group is so important because I can exchange my knowledge and improve it with my classmate" (pupil 11.b VIII).

Group learning process. Concerning to the subcategory "learning process", the pupils in both 4th and 8th grade emphasized their interpersonal interaction, support and many circumstances while they are learning together. They stressed that they are more active in the group than individually and they share their opinions by giving instructions to each other. They also wrote that learning together facilitates their decision making or common agreement as a group and gives them support from their classmates. Support was recognized both academically and emotionally.

The 4th grade pupils used words like "joy" and "fun" while for the pupils in 8th grade learning together means "interesting", "amusing " and "more relaxed "work.

Friendship. For the majority of pupils in both 4th and 8th grade, learning together means building friendship. They wrote that in these learning situations, they start to know each other better, perceive their classmates as real friends and they are making their friendship stronger. This makes their task work easier because of trust and good communication. While the pupils in 4th grade paid more attention to friendly love, in 8th grade pupils paid attention to social skills such as trust building, decision making and communicative skills.

Feelings. The pupils in both 4th and 8th grade perceived different kinds of feelings by their status as individuals or members of the group while they are learning together. They agreed that they are more satisfied while they are learning together than alone. In general they wrote that they are feeling good, amused and relaxed when they are working together and they are laughing more because there are always some funny situations. Pupils in 4th grade wrote more about elementary feelings "joy and happiness" as the most frequent feelings after love. In 8th grade pupils mentioned deeper feelings related to respect to each other, understanding and the feeling of freedom of expression. "We can express our self freely without the fear that someone will bully with me" (pupil 3.g.VIII).

4.2.3. Arena "The Cooperative process "

This third arena contains pupils' perceptions of their process of learning together with their classmates. We can observe the answers through a part of general and more

concrete views that may be differentiated in accordance with the following subcategories: group-learning process, activities, support and communication.
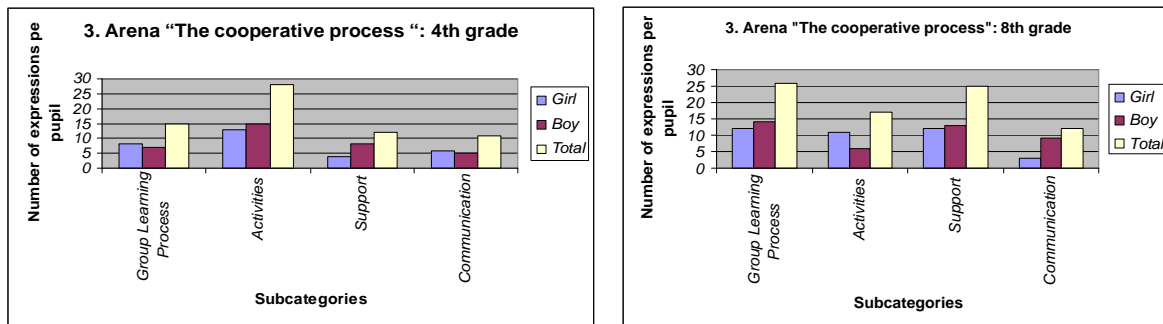
Graph3: The expressions distributed to the subcategories in arena "The cooperative process"

In this arena, there is a significant difference between "activities" (28 exp.) and other subcategories in 4th grade. "Support"(12 exp.) and "communication"(11 exp.) have almost same importance in learning together for pupils in 4th grade. For pupils in 8th grade there is a very near link between "group learning process"(26 exp.) and "support" (25 exp.) as the most frequent expressions. In 4th grade, boys had more expressions related to "support" than the girls. In 8th grade, "activities" are mentioned by girls more than boys and vice versa in "communication".

Group learning process. The pupils in 4th grade expressed a more general view "how to learn together". They used words like "friendly", "good"," hardworking" or "edifying" to describe the process of working together. They emphasized how they stick to the different rules related to their behavior, discipline in the classroom and in the group function. The pupils from 8th grade focused more on the structure of working together. They described decisions concerning how they will work together. "After we receive our task, we first divide it among us .We discuss the task and help each other" (pupil 2.b.VIII). In this way, they describe the manner of work, as a "step by step" process. "Everything depends of the task. If the task is more complicated, we divide it. Each of us solves it in our own way. The one of us, who finishes a task first, helps the others" (pupil 4.g VIII). Individuality and task responsibility were also described in the pupils' essays.

Activities. The pupils from both 4th and 8th grade linked the different activities with school subjects. Looking at their responses, the pupils from 4th grade focused more on

being creative. They mentioned that play gives creative possibilities to learn together and connect the present learning with the past learning in an amusing way. "My classmate starts to be my teacher and I am his pupil. He makes tasks for me and repeats what we have done before and vice versa. This way of learning is so funny" (pupil 6.b IV).Creativity was an ingredient when the pupils from 8th grade wrote about principles of working together for instance, "from easier to complicated", "from joking to serious work" and "from known things to unknown". Each pupil wrote about his or her individual role in their groups and how the whole group functioned. From their point of view it leads to group solidarity. "When I work with my classmates, we exchange ideas, assist each other and later we compose all our tasks in one" (pupil 8.g VIII).

Support is another characteristic that is used here as subcategory of the pupils' descriptions of the cooperative learning process. The pupils both in 4th and 8thgrade wrote about their strivings for giving and receiving help. It appears in different variations for pupils in 4th grade describing general friendly interpersonal relations and for pupils in 8th grade mentioning more effective working relations. The pupils in 4th grade described their trustful and secure relationships in help to each other through readiness and openness at every moment. Pupils from 8th grade were more apt to describe skills to support each other in cooperative groups such as "encouragement", "acknowledgment" and "given feedback". "If there is a slow learner in our group, we help her and do not lose patience while we are waiting and encouraging to finish task" (pupil 9.g VIII).

Communication was mentioned by pupils from both 4th and 8th grade as another important aspect in their learning together. Many pupils perceived rules and skills as two features of communication. In 4th grade the pupils were more oriented to rules of communication among them, such as "do not interrupt a friend", "listen attentively", or "speak clear and loudly" .The pupils from 8th grade wrote more about applied communicative skills such as "giving advice", "discussing", "debate" or "arguing".

4.2.4. Arena "What do pupils like with cooperative learning"

In the pupils' writings about what they liked with cooperative learning, the following subcategories appeared: to be together, working atmosphere, personal traits and care.
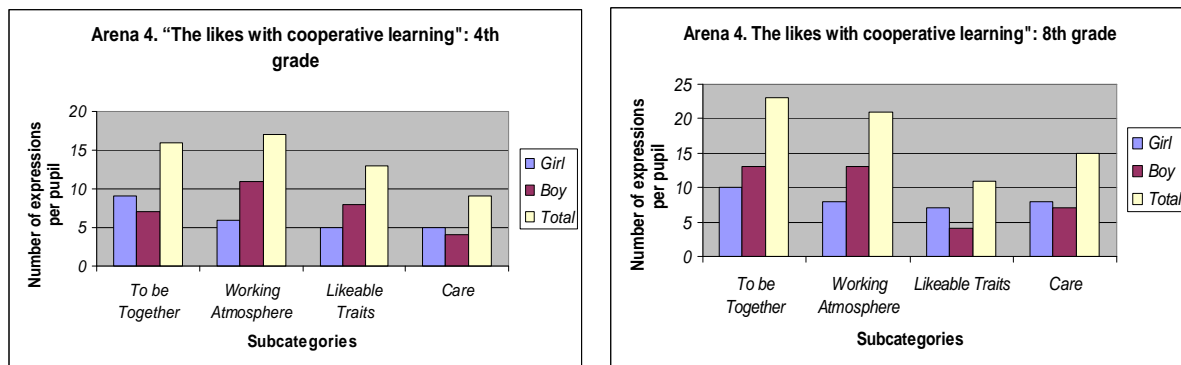
Graph 4: The expressions distributed to the subcategories in arena "What do pupils like with cooperative learning"

"To be together" (16 exp .in 4th), (23 exp. in 8th) and "working atmosphere" (17 exp. in 4th), (21 exp. in 8th) were what the pupils seem to like the most with cooperative learning. For these two aspects in both grades, the boys gave more expressions than girls except in "to be together" in 4th grade. The "likeable traits" are given more characterization by pupils in 4th grade than in 8th grade, but for "care"it is vice versa. In addition, the boys in 4th grade expressed "likeable traits" more than girls and vice versa in 8th grade. "Care" in both grades, was mentioned more by girls than boys.

To be together. The subcategory "staying or being together" is what the pupils seem to like most with learning together. Three types of general characteristics have been placed under this category namely: to be friendly with, to learn and to support. However, all of the pupils' answers can be linked to this category "be together" through two main features which choose to call: interpersonal dynamic and celebrating diversity. The pupils from 4th grade wrote about learning activities and situations where their group dynamic is increased by "practicing"," modeling" , "examining" and "exchanging" together. They described a diversity that exists among them focused on acceptance, support, friendship and diversity of activities. "I like to work together because nobody rejects and attacks me, if I do it in a different way than them." (pupil 9.b IV). What the pupils from 8th grade like can be clarified as

cause - effect relations. They emphasize the benefit as a product of their learning together under good conditions, which makes their work successful. The final aim is a good mark. Otherwise, they like the diversity of opinions, knowledge, new and diverse attitudes, diverse ideas and tasks. "I like first of all that there is no discrimination, if you are for example with Roma pupils in the group" (pupil 10.g VIII). This thinking is similar to what pupils from 4th grade wrote about how they like to sit with different pupils and to know them better and better.

Working atmosphere described by pupils as likeable can be summed up through the following features: cooperative behavior, opportunity, creativity and group success. Pupils from 4th grade focused more on behavior and opportunities for group working. They wrote more generally about "beautiful behavior" and "without noise". Of specific popularity is to play and also creativity. Pupils from 8th grade liked the opportunity to "joke", "humor", "relaxed working atmosphere "and also "freedom of expression. They wrote that they liked group success as product of their persistence and good working atmosphere. The pupils summarized that they liked that this form of learning is a "habit" in some of the school subjects.

Likeable traits. Pupils in both 4th and 8th grade mentioned different personal traits of their classmates such as emotional, social, moral and intellectual traits. Pupils from 4th grade wrote more about social and moral, while the pupils from 8th grade mentioned more emotional and intellectual traits of their classmates. Trust seems to be the most important for them. "I like when I tell a secret to my friend and he keeps it". In addition, younger pupils wrote about being stingy. They like when their classmates are not stingy when they need to share different things within the group. Pupils from 8th grade like traits, which can be categorized to critical thinking and communicative traits. They like when their classmates give them feedback or good comments and when they support and encourage each other.

Care is coming up to the surface from the pupils' writing about their likes of cooperative learning. It focuses on help from a general to a more academic level. Pupils from 4th grade wrote about help as part of care for classmates when they have some barriers or a problem with understanding a task. Pupils from 8th grade wrote

more about concrete help in learning situations that could be called peer mediation. They described care for each other also in out of classroom situations. "My classmates never leave me, if I have some problem. They always support me when I am sick, unhappy or when I can not do something" (pupil 4.bVIII).

4.2.5. Arena "Dislikes of the cooperative learning

This arena is related to answers about what pupils dislike when they are learning together with their classmates. Pupils from both 4th and 8th grade described diverse but at same time similar phenomena about what they do not like. They are summed up in the following subcategories: lack of discipline, self-oriented pupils, group composition, non-communicative skills and the subcategory other aspects.
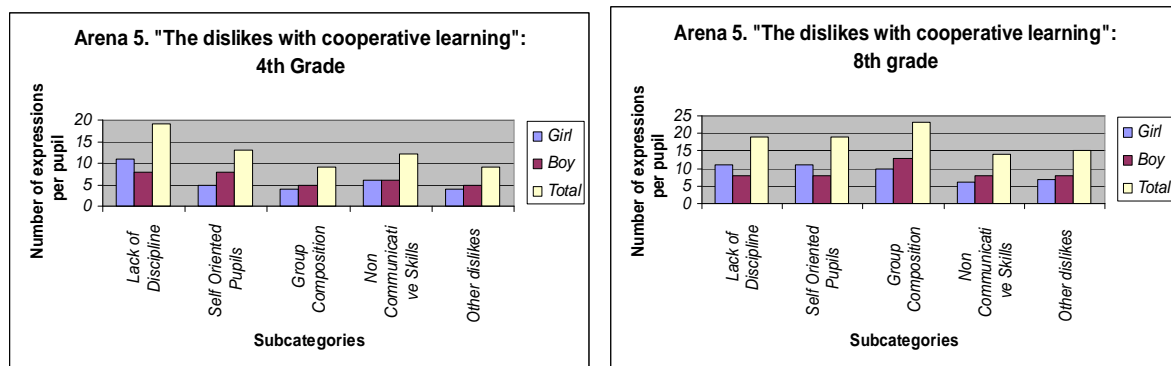
Graph5: The expressions distributed to the subcategories in arena "The dislikes with cooperative

The most frequent dislike for pupils in 4th grade is "lack of discipline"(19 exp.) and "group compositions"(23 exp.) for pupils in 8th grade. Pupils in 8th grade had equal number of expressions according to" lack of discipline"(19 exp.) and "self-oriented pupils"(19 exp.)Related to these subcategories in 8th grade the girls wrote more than boys. The same applied to pupils in 4th grade for" group compositions"(9 exp.) and "others dislikes" (9 exp.), which both were expressed more by girls than boys. In 4th grade girls and boys gave the same number of expressions in "non communicative skills" as their dislikes.

Lack of discipline. Pupils from both 4th and 8th grade wrote that they do not like noise at all, which is produced by themselves through disrespecting of the classroom's rules. The pupils from 4th grade expressed different actions that make noise while they are working together such as scratching the classroom wall or the creaking of the

chair under their legs. In addition, they mentioned that very loud reading and talking that is not related to their group task disturb their concentration during the learning process. Pupils from 8th grade wrote about some pupils who directly disturb the working atmosphere. In additions, they emphasized provoking, insulting or simply joking with some pupils. They mentioned that noise and non-regulative pupil's behavior appear in some phases of the working process such as: in the final group presentation of a task or when they have to organize their work in the group through delivering the roles to group's members.

Self-oriented pupils. To this category belong pupils' statements concerning non accepted individual traits of pupils, more self oriented work than group work, negative leader's behavior and troublemaking pupils. Pupils in both 4th and 8th grade wrote about selfishness as a negative trait. Pupils in 4th grade disliked that pupils separate themselves and do everything alone without sharing their work with others or making themselves "a more important person than others "and "boss others". Pupils in 8th grade wrote about some classmates' traits which they dislike such as "more dominant pupils", "non-cooperative "or "uninterested towards work". In addition, they do not like the kind of pupils who say for themselves that they are shy and withdrawn and for that reason, they cannot learn very well or realize something more successfully together. They described as dislikes when some pupils exploited the others in order to collect better marks. In their descriptions, troublemakers who are not care of any warnings from teachers or classmates very often leads to a quarrel in the group, what is dislikes for them.

Group composition of dislikes is categorized under concepts: group formation, interpersonal working relations and competitive group atmosphere. Pupils from 4th grade wrote about unbalanced working relations in their work. "Some pupils work too much and some pupils are doing nothing" (pupil 7.g IV).The competitive relations as part of their dislikes reflects perceived intentions of some pupils to get better mark in comparison with others. This can be recognized as non-supportive members of the group who "forget" to help other group members. Pupils from 8th grade wrote more about groups as not so well structured. They do not like when their teacher have not

good assessment of the possibilities and needs of the pupils and in this way organize a non-functional group. "Sometimes in some of the subjects, the teachers create groups so that all the good pupils are in one group and put the weaker pupils in another group. I do not like it and I think it is not good for the groups" (pupil 2. g VIII). Some pupils characterized passivity as their dislikes although they want to activate the pupils who have this trait. In addition, they do not like when some pupils are "awarded" with good marks even though they were not enough active in the group. They also wrote about competitive goals among the groups. They do not like the situation when a better group emphasizes, in a very self-proud matter, that they are really better than the other groups.

Non communicative skills. Quarrelling and squabbling are the most mentioned expressions in many of the pupils' written answers about their dislikes with learning together. Pupils in 4th grade mentioned that they quarrel when they cannot find common agreement in a general view or there exists no real reason. Pupils in 8th grade wrote that squabbling may happen when they are dividing the task, choosing different group roles or facing problems with "trouble makers". They described non-listening skills as one of the main dislikes especially in situations when they tried to show their classmates that their results are not correct

Other aspects. Generally, pupils in 4th grade were more distant from the arena "Dislikes with cooperative learning" than pupils in 8th grade. Their usual answers were: "I cannot think of anything that I dislike" or "I like everything with learning together". The pupils from 8th grade were more critically oriented in their writings. Too many facts and too much information are unnecessary and useless in cooperative learning from their point of view. Many of them dislike that in some subjects, teacher always organizes their group work in the same way. "It starts to be boring and monotone when we are always learning in group on the same way".

4.2.6. Arena "Helping others during cooperative learning"

This arena is divided into the following subcategories: intentions, helping strategies

and assessment. Together, these subcategories summed up the pupils' answers about how pupils help their classmates with learning together in groups or pairs.
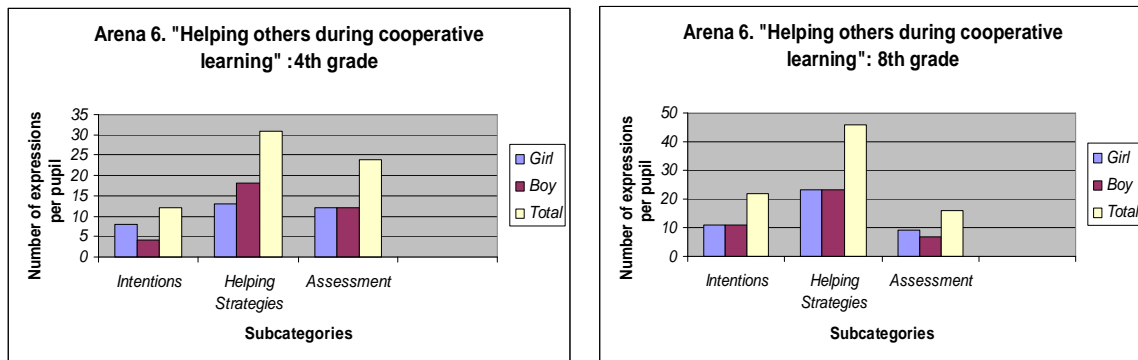
Graph6:The expressions distributed to the subcategories in arena "Helping others during cooperative learning"

Subcategory "helping strategies" was more dominant in both 4th (31exp.) and 8th (46 exp.) than the other aspects. In 4th grade" assessment" (24 exp.) is the second important feature during "helping others" while for pupils in 8th grade second is "intentions" (22 exp.). In this arena, the subcategories "intentions" (20 exp.) and "helping strategies" (23 exp.) were equally often expressed by boys and girls in 8th grade and same for "assessment" (12 exp.) in 4th grade.

Intentions. Several of the essays described reasons for helping others in the group. Pupils' answers to"why help" appear related to their goals. In both 4th and 8th grade, pupils wrote in generally about helping and about concrete helping situations. Thus, pupils in 4th grade help their classmates to make the learning easier for them. They emphasized that "they start to be closer" when they are helping their classmates. When giving help to someone, they are aware that sometimes they will be in situations where they will need help. The final goal of helping is to be more together and be more friends with their classmates. Pupils in 8th grade think more deeply. From a general view, they want to help because it is a positive oriented approach to help someone who needs it. Their main goal is"to help well"and "more efficiently". They wrote that each pupil can manage and overcome tasks if classmates help him or her. From their point of view, persistence in helping is important. It creates good friendship and has a positive effect on the helper's self-image "It makes me a better friend and I am happy because of that" (pupil 5g VIII).

Helping strategies. Several answers described how to help mentioning: helping

strategies, different manners, procedures and tools. Pupils in 4th grade wrote generally using words like: "I explain", "I correct", "I ask more questions", or they simply expressed "I help well". Some of the pupils wrote that they help their classmates finding out a solution for them or just doing the task for them. They emphasized that this kind of help is short-lived and is not good. "They have to learn also and it is not good for him if I solve the task instead of him" (pupil9b.IV). Pupils in 8th grade wrote about two kinds of helping strategies. The first kind is a shorter, more temporary help described as "I correct them", "I give an advice" or "I explain it by drawing". The other kind of help can be understood as more complete and permanent process which is focusing on some important phases with learning together. It is related to slow learners that are recognized to need help for a longer period. Several pupils wrote about the same principles in long term helping such as "step by step" and encouraging or giving praise to classmates. During the helping process, pupils emphasized different tools used to facilitate their helping others. Tools were described in pupils' essay as concrete or more abstract. "Always in front of us we have a notebook, textbook, our papers and our drawing papers. (pupil 12.bVIII). The more abstract tools were described as "new idea" "thoughts" or "suggestions". They wrote that they help their classmates when they divided the group tasks according to the ability of each member .They understood this kind of working strategy as a help for their classmates. "If she is a weaker pupil, we let her work on the easier part because I know that it will help her" (pupil 3.g VIII).

Assessment. The pupils in both 4th and 8th grade assess certain learning and life situations when they recognize that classmates need their help. They are not only helping when someone asks for help, but also when someone does not ask for the help. Pupils in 4th grade focused on assessment related to academic knowledge in school subjects, borrowing different working materials and assessments for helping in life situations. They wrote that they help in situations when their classmates "make mistakes", "forget something", "can not understand" or" have bad marks". Pupils in 8th grade assessed their classmates as individuals who have their own characteristic needs. In this way they are ready to help pupils who" are weaker", "are slow learners

with difficulties", or more "shy". Some of them described that they asses their own ability to help "how much do I know".

4.2.7. Arena "Help from others during cooperative learning"

In this arena pupils from both 4th and 8th grade wrote about many kinds of help that they received from their colleagues in different learning situations. Their answers are summed up through the following subcategories: needs, helping manners, relationships in helping and general view.
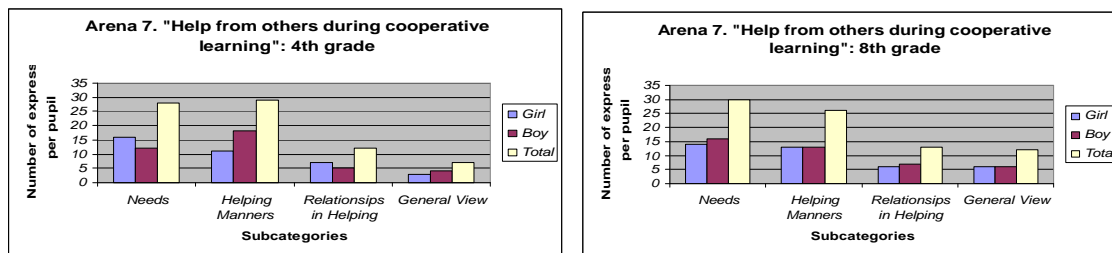
Graph7:The expressions distributed to the subcategories in arena "Help from others during cooperative l."

The most expressed subcategories in both grades are "Needs" (28 exp. in 4th), (30 exp. in 8th) and "Helping manners" (29exp. in 4th), (26 exp. in 8th). Many of them, 4th (12 exp.) and 8th grade (13 exp.) mentioned "relationships"as an important feature of "receiving help from others". In 8th grade "Needs" and "relationship" were more frequently mentioned by the girls than the boys, but vice versa in 4th grade. "The helping manners" was dominant for girls in 4th grade while in 8th grade a balance appeared among boys' and girls' expressions.

Needs. The pupils recognized many learning situations what they need help from their classmates, both related to individual and group needs. Pupils in 4th grade mentioned knowledge in school subjects, working material and life situations. Their needs for help were more orientated to academic knowledge such as "I can not understand", "The task is not clear"," I can not solve the problem alone" or" I do not know the content at all". They wrote about need to borrow different learning materials if they do not have it during their group activities. They also described receiving help in many life situations outside the school. "When I am sick, my classmate comes to my home; she is staying with me and explains what they did in the school ;she leaves her

notebooks" (pupil10.g. IV). Pupils in 8th grade wrote in a more general way that all of them need some kind of help when learning together. Mostly, they need help when "We have so large tasks", "We have some problems", "We have some difficult questions", or "Our task is not clear enough". In addition, pupils wrote about their self-assessment needs. If they can explain a problem and assess them better, then help is coming more effectively "In my case when my classmates help me, first I need to be more concentrated and tell them what is unclear. Then they can help me better" (pupil 10.bVIII). In addition, the pupils expressed that they need help in learning so that they can be capable later to solve problems alone or help others in similar tasks. Thus, receiving help could be understood, from the pupils' point of view, not only as an individual, but also as a group benefit.

Helping manners. Pupils from both 4th and 8th grade wrote about the way they were helped. Most of them answered that they receive help "in the same way as they give it". Pupils in 4th grade focused on helping manners related to content of school subjects and general life situations. They explained that they receive help in academic knowledge through their classmates "clarify it for me"," explain to me", "give me more information" or "ask me more". Many of the pupils used the term "to be friendly with" as a very important feature in some life situations, especially for pupils who have no brothers or sisters. Pupils in 8th grade wrote more about peer guidance manners. They mentioned different facilitating manners. Good communication was described as an important tool during receiving help. In several essays, they wrote that during the classmates' explanations of the task, an understandable speaking manner helps them a lot to work out a solution.

Relationships in helping were described by pupils' essays from 4th and 8th grade as generally "good". They wrote that help from others is coming directly or indirectly and either in or out of the classroom. Pupils in 4th grade, used words like "kindly"," nice"," patiently" "friendly" or "good" to express their relationships during helping. They mentioned "face to face help" but also indirectly listening and observing classmates them in some learning situations. Pupils in 8thgrade described more in depth the "good" relations with their classmates while they are receiving help. Effort

and persistence appeared as the most commonly applied terms. "Good feelings" are also mentioned many times by the pupils as a more general view. They appreciate when classmates help them and they express it by thankful words.

General view. In addition to the mentioned categories, pupils in 4th grade applied terms like "always" and "readiness" as most frequently in their descriptions of received help. They seem to think that if they help someone, they can expect to get help as well and vice versa. The pupils in 8th grade stressed the term "to be together". To be and work together is described already as a kind of help for them.

4.2.8. Arena "Improvement of cooperative learning"

This arena deals with presentation and description of data through the pupils' suggestions for further improvement of learning together. Concerning the existing practice of learning together in both 4th and 8th grade, the pupils wrote mostly about positive reflections of learning together. However, they still send words to us about how to improve some segments of cooperative learning by often using the terms" make better", "more often", "more time". Thus, already mentioned subcategories related to the "Arena 5" about their dislikes with cooperative learning need to be improved. Their answers are systematized in the following subcategories: skills, group rules, learning resources, group process and cooperation for all by pupils' view.
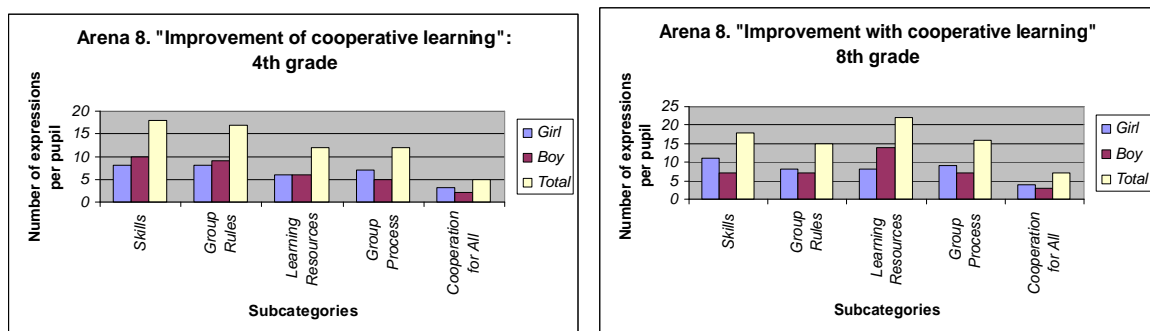
Graph8: The expressions distributed to the subcategories in arena "Improvement of cooperative learning"

"Skills"(18exp.) and "group rules"(17 exp.) were targeted by pupils in 4th grade as the priority for improvement in cooperative learning, while for the pupils in 8th grade it were" learning resources"(22 exp.) and "skills"(18 exp.). In 4th grade, the girls gave more expressions for "skills" and "group rules" than boys. However, the boys were

leaning more towards "group process" and "cooperation for all". In 8th grade, the girls gave more expressions only in the subcategory "learning resource" than the boys.

Skills in communication trust building and overcoming conflicts were suggested for improvement by pupils in both 4th and 8th grade through both individual and group skills. Pupils in 4th grade emphasized better communication to overcome the quarrelling. Most of the pupils wrote that they need to be better at making decision as a group and to create more new ideas. According to their self-concept, some pupils saw themselves as individuals who need to improve their personal skills for better cooperation in the group. Pupils in 8th grade introduced the term cooperative behavior as ingredient of group skills. They emphasized that communication need to be better especially in form of listening to each other. In addition, they mentioned gossiping as a negative communicative skill and they stressed that it must be minimized In general, the pupils pointed out that all of them need to have a "feeling for group work". It is very important for them that no one is exploiting others and not being selfish.

Group rules. Almost all pupils wrote about working rules and the necessity for consistency in implementation of further group work. They linked it with working atmosphere as an important segment to accomplish their learning goal. There were many similarities between answers of pupils in 4th and 8th grade. The most frequent rules for improvement of group work were "to be more active" and "all need to be included and participate in the work". They want that each member works and contributes to the group on his or her way; "not only looking around and waiting for others to finish the task" (pupil 3.b VIII). They mentioned discipline as an important prerequisite for more concentration and efficiency of learning together.

Learning resources are related to the pupils' suggestions for improvement of learning time, environment and application of different medias in learning together. Pupils in 4th grade suggested using medias such as TV sessions;" to watch some interesting educative and scientific children's program together, and later talk about it"(pupil 4.b IV). Some of them would like more group work in mathematics. Most of the pupils from 8th grade stressed that they need more time and opportunities to work together, not only in the same school subjects but also in other subjects. They

suggested more group work from 5th to 8th grade like it was in younger grades. In addition, they pointed out their wishes to have longer sessions with group work and more brief breakes for eating and drinking. They wrote about more space in the classroom and rearrangement of benches to be more functional. Several pupils highlighted that good, relaxed music could be used as an appropriate media to support their group work. They suggested applying as soon as possible computer equipment and other digital medias as facilitating tools the group work. From their point of view it would be attractive for children who have concentration problems.

Group process is related to how the group could better function from the pupils' point of views. Taking care as much as possible for each other was suggested by pupils in both 4th and 8th grade. Pupils in 4th grade wrote that the group could function better if the teacher planned group work in a more interesting ways. They emphasized that each pupil need to contribute better in the group cooperation through helping and activating others. Pupils in 8th grade saw improvement of cooperative learning through better formation of the group, support to slow learners and development learning of strategies. If, from their perceptions, the group is not good structured, the process of learning will suffer. They suggested more practical work, more investigative work, not only work on some written texts. They further point out that teachers need to help them to find better ways to include each pupil "to be more active".

Cooperation for all. Pupils in both 4th and 8th grade wrote that learning together is not only for pupils. They suggested that teachers, parents and other persons need to learn together too. Pupils in 8th grade would like that they link their learning together in extracurricular activities with learning in school subjects. Their message to their teachers was to be more flexible as in extracurricular activities and not so strict in the ordinary class hours.

4.3. Presentation of interview data

In order to grasp the pupils' perceptions about the cooperative learning, their perceptions about themselves in cooperative group and their perceptions about their

interactions with others in cooperative learning process, I also used another angle in data gathering. I interviewed six purposefully selected pupils. These interviews are going more in depth with the intention to find more different aspects of the phenomenon pupils' cooperative learning. I purposefully selected one pupil who is fast learner and one who has some kind of special needs in both 4th and 8th grade from the research selected school. In addition, I also interviewed in another school one pupil who has a significantly lower level of mastery than other pupils in her regular class, and her classmate who is a fast learner. This additional school is more oriented to traditional education than the selected research school, but with some regular classes oriented towards child centered education, such as the class of these two interviewed pupils (more information in Varunek, 2006). I have given each pupil fictive name to ensure anonymity of their real identity. Thus, the pupils with special needs have the following label (PSN) and the pupils with strong academic ability are labeled as (PSAA).The numbers (suffix) for grade identification as **4** for 4th grade and **8** for 8th grade are presented in Table 3.

Table 3: Identification of names (pseudo) used for pupils

School	Grade	Informant	Pseudo name
Research Case School	4th	Pupil with Special Needs	Dino PSN1-4
		Pupil with Strong Academic Ability	Mujo PSAA1-4
	8th	Pupil with Special Needs	Ana PSN2-8
		Pupil with Strong Academic Ability	Mark PSAA2-8
Another Additional School	8th	Pupil with Real Special Needs	Sana PRSN3-8
		Pupil with Strong Academic Ability	Vera PSAA3-8

4.3.1. Background of pupil informants

Dino (PSN1-4) is selected for interview because of his physical impairment. He has a disability because of cerebral palsy and visual impairment. However, he is a good learner with good family support. In spite of his health problems, he was enrolled in the regular class from 1st grade.[32] Periodically, he has not attended school due to

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[32] Up until the 90s there was a traditional form of schooling in our country; regular schools and special schools as well as specialized classes at regular primary schools. The regular primary school was not supposed to educate children with psychical and mental difficulties. According to the Law on Elementary and Secondary Education in the Federation of

health complication and therapy programs but it has not had consequence for his learning pace. Ana (PSN2-8) from 8th grade is a member of Roma population. She is a generally slow learner and has problems with language. Her mother tongue is different from the school's language. She is living in a huge socio-economic deprived family with lack of parental support and involvement. As a 10 year old girl, she enrolled in the school. She started in this class from 4th grade after passing some extraordinary exams.

Sana (PRSN3-8) is an intellectually challenged child and really slow learner because she has trisonomy 12. The child, significantly different from her peers, was enrolled in 1st grade and in same time was a huge challenge for her teacher and her classmates (information took over by her teacher Varunek, 2006). Sana was first pupil who had the needs for individual curriculum that diverse much from the rest of pupils in her class. Sana is a rare positive example of a pupil with substantial special needs who was welcomed and accepted in the regular school in BiH and supported by her classmates, teacher and parents. Three pupils with strong academic abilities Mujo (PSAA1-4), Mark (PSAA2-8) and Vera (PSAA3-8) are selected from 4th and 8th grade. They are very popular, supportive to their classmates and very fast learners in all school subjects. Mujo is characterized by his classmates as a very good friend who is always open to help. Mark grew up without father. He is a great support to his family, especially to his sister who has severe visual impairment. Vera (PSAA3-8) from the additional school is one of the Sana's classmates who takes care of her in every situation, thus she stated that she is proud of her specific and very human role towards Sana.

4.3.2. Analysis and presentation of thematic developed subcategories

In the interviews I used earlier prepared and applied essay questions and some

additional sub-questions related to the main themes . According to the purpose of logical presentation and analysis of interview data, I developed a summary of themes and sub-categories that contains the pupils' perceptions of cooperative learning from their personal perspectives.

The interview data are analyzed and presented in **Table 4.** under three main themes through 11 subcategories related to the essay questions.

Table 4: Summary of the main categories and subcategories used for interview data processing

Main Emergent Theme	Sub-Categories
The pupils' perceptions of cooperative learning	-Pupils' perceptions of cooperative learning tasks -Pupils' understanding of the meaning with cooperative learning -Pupils' perceptions of cooperative learning process
The pupils' perceptions of themselves as member of a cooperative group	-Pupils' perceptions of their feelings in the group -Pupils' likes with cooperative learning -Pupils' dislikes with cooperative learning -Pupils' perceptions of helping others
The pupils' perceptions of interactions with others in a cooperative learning group	-Pupils'perceptions of expectations from classmates -Pupils' perceptions of receiving help from others -Pupils' perceptions of communication -Pupils' perceptions about improvement of cooperative learning

An introduction of the interview presentation

In the interviews, many of the pupils gave similar answers according to same subcategories as in the essay. Hence, many of them supported what already were written in the essays. All pupils stated that cooperative learning gives them more opportunities for creativity, sharing and good friendship. During the cooperative process each pupil stated that he or she can contribute to the group achievement by getting support from the classmates. Security, happiness, satisfaction and friendly feelings seemed the most frequently mentioned aspects in the interviews. Like in the essays, good communication, good relationships, opportunities to be more together and to support each other in and out of class, were also the most positive mentioned likeable aspects in the interview. Interviews conformed also that selfishness, non cooperative skills, persistent trouble maker and quarreling were the most commonly dislikes. Helping and receiving help were expressed in both academic and life situations by assessing their classmates' abilities, guiding, supervising and

encouraging through positive relationships. Communication was mentioned as a very important aspect in both verbal and non verbal expressions. Although, all of the interviewed pupils also had a positive perception of cooperative learning, they suggested improving some personal traits, communicative skills, better discipline, and a better strategy to involve the troublemakers in the cooperative process. In the following text I will present new aspects of cooperative learning mentioned by both slow and fast learners through main emergent themes.

4.3.2.1. The pupils' perceptions of the cooperative learning

Cooperative learning tasks were generally understood as support for each others mentioned by all slow and fast learners. PSAA stated that school subjects Physics, English and Germany language give them possibilities to work in pairs and groups where they have responsibilities for others. Mark stated that role-playing is a specific creative activity for practicing foreign languages together with his classmates. PSN saw the cooperative learning tasks as a way of facilitating and helping in "different curriculum contents. According to Sana the most concrete and easiest creative activities were prepared, offered and mediated by her classmates.

The Meaning of cooperative learning. PSAA stressed that learning together with different pupils is a larger challenge and adventure than learning alone. PSN think that they have better social and emotional states in cooperative learning. Dino pointed out "as improvement of learning in the future" especially for pupils who have some difficulties. For Sana, care and receiving praise daily from her close female classmates is most important meaning and benefit of cooperative learning.

Pupils' perceptions of the cooperative learning process. PSAA see themselves in the role as helpers to the others in the cooperative learning. Vera stressed that she is attentive towards the pupils with difficulties, such as her classmate Sana. She gives her the easier and more concrete task related to her level of mastery. They mentioned that during the cooperative process, they communicate a lot to prepare work and to improve logical understanding without learning by heart. As Mark emphasized, everyone needs to be included and to receive help in order for the group to succeed.

PSN are aware that they can lean on their classmates to receive help. From Ana's point of view, the help is coming even when she does not ask for it. Sana's classmates tutor her on a daily basis through different activities.

4.3.2.2. The pupils' perceptions of themselves as member of cooperative groups

Feelings in the cooperative learning. Learning together makes the PSAA feel more useful and confident in relation to others. They are growing up emotionally when they are applying their helpful role. Mujo has developed a deep emotion of faith in his classmates so he is certain that they never leave him in the lurch. Compared to learning alone, Mark realized that learning together made him less stressful and more relaxed. The PSN expressed that laughing and humor is an important part of learning together. Ana pointed out that she is not uncomfortable around her classmates because nobody provokes her like in some situations outside school. Sana expressed her happiness through body language showing me her love by stretching out her arms and touching her stomach. Her statement that she never cries in school indicates her satisfaction in having classmates around her.

Pupils' likes of cooperative learning. PSAA stressed that they like the cooperative way to acquire knowledge because they can keep it longer than temporary. Mujo expressed that learning together is a wonderful combination of relaxing and serious work. Receiving praise by applauding and her classmates encouragement her by saying" bravo" are what Sana likes the most.

Pupils' dislikes with cooperative learning. Both PSN and PSAA disliked a pupil who behaves towards others as "chief". In addition, a pupil who boasts about him- or herself especially to the teacher, Dino said as his dislike. Sana doesn't like the new classmate that joined her class last year because she had no time to get to know him better and vice versa.

Helping others in cooperative learning .Two of the PSAA stated that they very often took responsibility for activating and making trouble makers more interested in the group work. Mujo emphasized that he was always helping his classmate Dino such as

to go downstairs, bring his schoolbag or when they are playing. PSN feel that they are able to help others and thus each PSN stated some specific aspects of their helping others. Sana's classmate Vera stated that Sana helps her in a unique way to awake empathy and develop her as positive human being. In many life situations Sana's mother transported her classmates to school trips and she actually mediated Sara's helping to others. Ana is very often requested to clean blackboard or to put different things on its place. She is doing this even when she is not asked for to do it. Dino's classmates appreciate his sincerity and he is helping others by giving honest comments to their clothing or something else.

4.3.2.3. The pupils' perceptions of interactions with others in cooperative group

Expectations from classmates. All pupils, both PSAA and PSN, expect their classmates to help them in learning and other situations as well as behave well towards them.   PSAA expect that all pupils can learn and contribute to the common work. Mujo as good academic learner expects that his classmates will never be jealous on him and not tattletale among each other or in front of teacher.

Two PSN expect that their classmates in the future continue to be good friends and support them. Ana described her expectations before she joined her class many years ago. She feared that nobody would sit beside her and that they would avoid her. She imagined that the teachers were big persons that beat the pupils with sticks. But after she joined the class she realized that her expectations were wrong and she tells that her classmates have supported her very much.

Pupils' perceptions of receiving help from. Two PSAA told that whenever they were not in a good mood, their classmates always made them better. Vera stressed that she receives a lot of love from Sana and it helps her to feel happy and satisfied

For PSN receiving help from classmates was understood as general care for them. Ana felt again a need to talk about received help in past time when she joined her class. The classmates helped her lot to understand the "school system". She stressed that they helped spontaneously even in situations where she did not ask for help. Sana

also received help in daily life's situations such as using the toilet, bringing her schoolbag or dressing herself.

Communication with learning together. To listen and to be heard are necessary aspects in communications for PSAA. They told that communicative skills during the learning process are important, especially when they are dividing a group task among each other and making common decisions. Mark said "it is not possible to learn together without communication together". This confirmed Vera 's opinion that "they can not learn successfully together if most of them are silent". Communication without offending and neglecting are related to PSN. Respecting and understanding their personality, ideas and opinions are important for their way of communication. Body language is much related to Sana. Her classmates stroked her palms very often and on this way they established a communicative link.

Improvement of cooperative learning. The PSAA stated that some pupils need to be more supportive and empathize other pupils especially those who have some difficulties. PSAA in 8th grade agreed that in the future they need to practice this method more often in every single school subject and not only in a few of them. Vera stressed that teachers need to learn how to organize this method. From her point of view, teachers need necessary skills and knowledge to implement cooperation. In addition, she told that teachers need to improve their authority, flexibility and adaptable skills in order to organize the cooperative learning in better ways. Mujo suggested that "all pupils need to think positive and to be good persons so we can cooperate better and then all can be successful together". PSN saw the improvement of learning together as a need to be friendlier outside the school area and visit each other more often at their home.

4.4. Summary

Generally, all pupils from both 4th and 8th grade wrote about positive experience in cooperative learning. They described that cooperative learning activities are more than only school tasks because they got more opportunities for friendship and socio-emotional development. Based on the pupils' statements, creativity, practical work,

more communication and support appeared as important aspects why cooperative approach is a convenient situation in the learning as well at school and other in places. For pupils with special needs interaction, support and care received from their classmates create positive, welcoming and "happy" climate in which they are sociable and learn with others in suitable activities. The pupils with strong academic ability described their role as helpers as a challenge and good human feature. In addition, pupils in 4th grade also wrote about parents as helpers in their learning together, while pupils in 8th grade mentioned peer mediation even in more depth. During cooperative learning, playing is more applied in 4th grade than for pupils in 8th grade who prefer computers and digital media. The cooperative learning presents "more fun" for pupils in 4th grade, but pupils in 8th grade characterized it as" relaxing work without stress". Despite positive reflections of cooperative learning, all pupils stated that cooperative skills, group rules and learning resources should be improved. Especially, pupils in 8th grade emphasized insufficient practice of cooperative learning and the need for increase of cooperative skills amongst teachers.

Chapter 5: Discussion, Conclusion and Recommendations

5.1. Introduction

The aim of this study was to find out how pupils in a purposefully selected primary school towards inclusion perceive cooperative learning based on their own experience. The investigation was conducted from two angles. The first one consisted of an essay study with all pupils from purposefully selected 4th and 8th grade in the research school as participants. The second consisted of in depth interviews with a small part of the participants from the essay study and from another school. The participants in the interview were three fast learners and three pupils with different kinds of special needs. The first part of this chapter, contains the discussion of the major findings presented in chapter 4 related to theories already mentioned in chapter 2. The second part holds concluding remarks. The third part contains recommendations for further improvement of cooperative learning based on findings in this study.

5.2. Discussion

In this component I am discussing both essay and interviews findings in order to answers research questions posed in the study and related to eight main arenas in which pupils voiced their own perceptions of cooperative learning. Thus, areas of discussion in this part are: Understanding of cooperative learning approach, cooperative learning activities, and cooperative process, what do pupils likes and dislikes with cooperative learning, cooperation as supportive learning, and suggestions to improve cooperative learning practices. In order to discuss data from two angles, I will apply theories already mentioned in chapter 2.

5.2.1. Understanding of cooperative learning approach

The findings showed that all pupils understood cooperative learning as a better way to acquire more and "better" knowledge and to have more opportunities to support each other in cooperative activities than individually. Support as a synonym of cooperative learning was recognized both academically and emotionally based on pupils' built friendships relations. In line with Aronson et al. (1978) noted in the Jigsaw classroom that engagement in a cooperative rather than a competitive process, it seems more likely that the nature of pupils' interaction should increase their abilities to take one another's perspective. Thus, their interpersonal exchanging of knowledge and opinions influenced on development of close relations based on positive feeling such as friendly love, satisfaction, respect and secure. It seems that as friends in learning, pupils can express more emotions, loyalty and responsibility towards each other which leads to support and improved level of mastery for each of them. Related to this, Ilic,(2003) has identified that all pupils share their experiences and increase their sensibilities for others in the same way as abilities for cooperation, care and responsibility through social learning in group interaction. Hence, cooperative learning appears as an opportunity in which pupils with different learning backgrounds meet each others, surpass problems together and support pupils who have difficulties in learning. According to findings, pupils with some kind of special needs were supported by their classmates so that through cooperative learning help was coming even when they did not ask for it. Help was often in form of adapted, prepared and mediated cooperative tasks by classmates in order to facilitate their "difficult curriculum contents". This is in line with Adalsteinsdottir, (2000) who noted that cooperative activities can provide support between peers which refers not least to pupils that experience learning difficulties. In same time, findings showed that cooperative learning is challenging for fast learners in order to guide and support their classmates who need more time and "easier" tasks to learn according to their level of mastery. This is supported by Vygotsky's concept of the zone of proximal development(1978) where more capable peers assist less capable classmates in their actual level of functioning and potential performance level. In addition,

Rogoff,(1990) noted that Vygotsky's model of the mechanism which facilitate cognitive development across social interaction resembles apprenticeships where a novice works closely with an expert in joint problem solving in the ZPD. In this study, interview findings showed that peers' guided participation during cooperative learning for a pupil with substantial special needs is more than only academic scaffolding. It is daily care in all situations both inside and outside school. Activities of daily living (ADL) appear as part of the care for pupils that learn cooperatively with others (Johnsen, 2001). Thus, positive peer relationships as benefits from cooperative learning are very important features to all pupils, especially those with some kind of special needs in order to ensure care and help. In this study cooperative learning was mostly understood as an important way to promote friendship based on social skills such as trust building, decision making and communicative skills. This is in line with Bronfrenbrener (1979) who noted that as the children do activities together, relationships of different qualities are developed

5.2.2. Cooperative learning activities

This study showed different academic and practical creative activities practiced during pupils' cooperative learning as very similar to many of the educational models such as "RWCT", "Step by Step", "Jigsaw Classroom Project" and "Reggio Emilia Approach" which offer the best possible opportunities that pupils experience learning together with pleasure inventing and implementing their ideas on different ways (Gandini, 1994; Milic, 2004). In line with essay findings, group work, small group projects, study visits and play were applied as the most common activities when pupils learn together inside and outside classroom environments. According to Vygotsky, play has affective and motivational aspects so that children's creativity may be fostered and their learning can be facilitated from a concrete to a more abstract level (Krauss-Dixon, 1996). Role play may be arenas for children to work out "scripts" of everyday life-skills and roles, values and beliefs and to learn to take the perspectives of others (Rogoff, 1990). In these situations pupils meet each other naturalistically where they may facilitate cognitively to each other and start to be

closer behaving naturally. Many of these cooperative learning forms, including role play, enable the pupils to be more curious and creative in order to explore some issues by operating with different natural and teaching materials. When these opportunities are combined with planned academic activities through cognitive, social and emotional level, it is not difficult to arouse excitement and interest so that science lessons become motivating and fun (Marvin & Stokoe, 2003:19). In the light of common success, cooperative activities were designed so that all pupils can share their knowledge and abilities towards joint problem solving. The complementary roles of classmates appear in these activities in order to foster pupils' development both academic and socially. According to Rogoff (1990), engaging children in an appropriate handling of a task, peers create supported situations in which children can extend their current skills and knowledge to a higher level of competence. Therefore, when pupils are involved in some interesting and meaningful cooperative problem solving activities, peer assistance in the ZPD has positive results for pupils who are less knowledgeable. In such scaffolding of pupils' performance Johnsen, (2001) noted that the capacity of all pupils is effectively used and nobody is passive. In addition, results of this study showed when pupils do cooperation activities they experience closeness which result in their encouragement and care for each other connected to the joy of joint problem solving (Putnam, 1993; Rye, 2001; Johnsen, 2001). Hence, in line with the interview findings, cooperative activities encourage pupils with some kind of special needs to learn and enhance cognitive development in the same way as to develop their satisfaction, happiness and belongingness having their classmates around them. Rye (2001) argues that positive student-student interaction through mutual empathy, adjustment and encouragements are main prerequisites for the pupils to thrive in school, learn, and develop both socially and emotionally. Therefore, engaging of pupils in joint activities provides more understanding of each other's differences and similarities and encourage positive acceptance (Brofrenbrenner, 1979).

5.2.3. Cooperative process

In line with essay findings, proper process and structure of cooperative learning for all pupils is based on "good communication", support, accountability and different roles of each group member towards success of their common task. It showed that these aspects lead towards pupils' group interdependence where each pupil is seen, supported and has an active role with learning together. In this regard, Johnson & Johnson (1989) noted that group tasks must be designed and communicated to students in ways that each group member's effort is required for group success and each group member has a unique contribution to make joint effort towards more positive relationships. Essay findings showed that pupils learn cooperatively by playing their responsible roles for group task in order to contribute problem solving and built supportive relationships. This perspective is supported by Rogoff (1990) who asserts that in guided participation, children are involved with multiple companions in organized, flexible webs of relationships that focus on shared activities, not exclusively on the needs of individuals. In addition, these social relationships provide children to participate in diverse roles important to development, and may buffer difficulties encountered by particular social partner. In line with the interview findings, for fast learners, being member of a cooperative group means to help, assist and "supervise" others. Thus, in the light of effective working relationships more skilled learners take over their roles of responsible partners for interactive situations mediating classmates with difficulties in learning. In such process of learning, mediation occurs when another person serves as a mediator between the child as a learner and the environment; preparing and reinterpreting the stimuli from environment so that they become meaningful and relevant for the child (Klein, 2001:37).Otherwise, interviewed pupils with special needs felt themselves encouraged and comfortable among classmates during cooperation. For Ana it was even more comfortable than being with her neighborhood's peers. In regard to this, Aroson, et. al,(1978) noted that a cooperative pupil is challenged to develop empathy and tolerance and must learn to work effectively toward common goals with persons who have different experiences and capabilities. Hence, the importance of pupils'

understanding of each others in the zone of proximal development relies on cooperative classmates named by Adalsteinsdottir (2000); Pavlovic (2005) "cooperative learning partner who may empower the pupils to act by feeling strong, capable and committed to support interrelationships". Findings showed that pupils voiced different rules of behavior and skills aiming towards" good" communication as the most important tool to reach their interpersonal dialogue and develop understanding of difficult problems that advance its solution during cooperative learning process. Related this, Wilson (2004) has mentioned a list of basic rules for the pupils, which are core values and can be adapted to suit different communication needs for pupils. Essay results indicated many skills such as listening attentively, giving advice, decision making, explaining and discussing as "useful tools for the pupils to work together, surpass conflict and learn something about themselves and one another in the cooperative process" (Gandini, 1994).This effort to communicate draws the pupils into a more mature understanding that is linked to new situations across more familiar. Using "step by step" manner to support less knowledgeable classmates, pupils in cooperative process applied communicative skills whether verbal and nonverbal as Rogoff (1990) noted like the bridge between one understanding of situation and another. In line with interview findings, pupils with special needs were supported and they communicated with classmates in order to be understood and understand others. Regarding to Salom (2006) quality of instructions from peers may be more effective than from teachers because children use more age-appropriate, meaningful language and may better understand their partner's potential frustrations.

5.2.4. What do pupils like and dislike with cooperative learning?

This study has shown that pupils like opportunities to be together when a cooperative situation allows them to develop dynamic interpersonal relations focused on the effectiveness of working together. It shows that this way of learning improves the chance for pupils with special needs to succeed in a regular classroom increasing peer acceptance as a starting point towards their cognitive and socio-emotional

development. Johnson & Johnson (1989) supported the results that cooperative groups promote children's acceptance of differences, whether those differences resulted from ethnic backgrounds or from disabilities. In line with interview findings, pupils with different ethnic and learning backgrounds assessed that they know each other better and learn more than only academically knowledge. Different emotional, social and moral pupils' personalities were seen through likeable traits developed and learnt from others working cooperatively. It leads towards diversity of their ideas, opinions, and solutions of task in cooperative working atmosphere which is more "enriched", enjoyable and interesting than learning alone. This findings are in accordance with Befring, (2001) and Putnam, (1993) who sustain that all children can celebrate diversity "flourish" and be welcoming in the classroom regardless of their individual ability levels, background and learning styles and to see each other as support. In line with interview findings, pupils like to care for each other in both academically and life situations inside and outside the classroom. It gives them more positive feelings and security so that some barriers and problems may be always solved with classmates. Hence, classmates appear as a valuable source of support in learning for each other aiming towards classroom solidarity and success for each pupil. Sehic, Karlsdottir & Gudmundstottir (2005) argued that in school as an educational setting, peer models are the most important sources of assisted performance for children and others. In regard to this, each pupil as an active individual in cooperation with others has a general aim to develop a sense of responsibility, cooperative skills, tolerance, solidarity and care for others (Johnsen, 2001). According to the available literature and findings, this is mainly why pupils like many aspects of cooperative learning in order to meet their different individual needs and level of mastery in regular classes such as class towards inclusion. It is supported by the scaffolding component which concerns the emotional overtones of the peer interaction. In working with children it is important that the adults (in this study peers) are pleasant, warm and responsive and that they give verbal praise and attributes competence to the child (Sehic et. al, 2005). Hence, receiving praise by applauding and encouragement by saying "bravo" is what Sana as pupil with

substantial special needs likes the most.

In line with my findings which indicate dislikes in cooperative learning, pupils emphasized disturbance of group work due to lack of discipline as a result of non respecting group rules and non regulative pupils' behavior such as troublemakers or pupils that "hitch-hike" on others work. Aroson, et. al (1978) noted that it is the pupil who does not work effectively in a group can even go so far as to sabotage their efforts at cooperation. According to findings, many different actions were assessed as helpful or unhelpful for joint activity. Thus, the purpose of cooperative learning related to groups'effort was to make its members more effective learners. In line with Rogoff (1990), the concept of scaffolding refers to the supportive situations in order to help children to raise current skills and knowledge to a higher level of competence. This goal in function to foster pupil self-regulation can be achieved as Sehic et. al (2005) asserted by letting children regulate joint activities as much as possible. Hence, it is important that pupils develop and regulate themselves on positive way of behavior applying pro social and cooperative skills in order to surpass quarreling and squabbling presented in findings as what pupils dislike the most in cooperative learning. In addition to the pupils' views, lack of self-confidence can be a barrier in learning together and group success. Shy and withdrawn pupils who thought that for this reason can not learn very well were supported by their classmates in order to increase their self concept aiming on their better academic achievement. In this regard Befring (2001) noted that many children can be remained vulnerable to develop negative attitudes towards learning and toward themselves to believe that they are unable to learn and inferior. Thus, positive self-concept as result of supportive interpersonal interaction with classmates Adalsteinsdottir (2000) asserts an importance that pupils are constantly interpreting their own and other's acts and responding to it through positive feedback during their interaction. It helps them to build up their self-confidence as Berk &Winsler (1995) noted in order to create good psychological adjustment, personal happiness and learning effectiveness. As an ingredient of positive interdependence, Johnson & Johnson (1989) emphasized this

psychological health and wellbeing as one of the main outcome of cooperative learning.

5.2.5. Cooperation as supportive learning

When children work together on group tasks, they often provide information, prompts, reminders and encouragement to other's requests for help or perceived need for help (Gillies & Ashman, 2003:11). In this study, cooperative learning was emphasized by all pupils as a support to everyone based on positive relationships and feelings aiming towards pupils' needs inside and outside the class. So, it was very interesting to notice that pupils developed assessment, intentions and own strategies in order to help others. As a result of these aspects, support and care were established in both academic and daily life situations reflecting on their socio-emotional development. These findings correspond to what Rye (2001); Rye & Hundeide (2003) have stated as one of the most important requirements for children to thrive in school, learn and develop socially and emotionally dependent of quality pupil-pupil interaction based on trustful and secure atmosphere such as home environment. In line with interview findings, help was recognized in a division of group task according to group members' abilities where pupils assist each others. Positive stimulus and encouragement were emphasized as necessity for weaker pupils in order to participate and accomplish task in the common work. Related to this, Ceric & Alic (2005) noted that supportive work through cooperative learning gives pupils opportunities to develop individual abilities, but in same time to help and learn from each other. Evidence related to both findings and literature is that each pupil can manage and overcome tasks and participate in joint activities if he or she receives adequate and efficient help cooperating with others who are more competent. In line with social constructivist theory, children learn by assistance and understanding from more capable peers who mediate cognitive as well as social processes in order to complete their tasks. Vygotsky asserts what a child can do in cooperation today, she or he can do it alone tomorrow (Dixon-Krauss, 1996:77). Interview findings showed that pupils with different learning background were able to mediate or be mediated in helping

during cooperative learning. An interesting notice was that a pupil with substantial special needs supported her classmates"in a unique way awakening empathy and influence so her classmates could develop themselves towards a positive human being receiving her love around them" (Vera). Moreover the study showed that, Sana's mother as a mediator helped her classmates to transport them on school trips. This was recognized as Sana's mediated help. It is in line with Varunek (2006) who argues that parents as partners support pupils' education both inside and outside school. This draws attention to the interdependencies between different areas of the pupils' interaction, notably between peers, family and schooling as stated by Bronfenbrenner. Different opportunities in a sense of being able to help and to manage school demands produce good friendly relations in the inclusive class and even more outside class and school (Johnsen, 2001). Most of the informants mentioned that their friendly relationships contribute efficiency of helping manners and strategies. It seems that building friendships by cooperative learning makes pupils more aware to respect and care for each other. Kemple (2004) noted that through friendship, every child has a sense of belonging and be respecting for his or her "differences". This aspect is very important in classroom settings such as in majority of BiH, where pupils need to develop a unique identity as an individual and social identity based on their ethnic, cultural and learning background to respect each other as cooperators and friends (Johnsen, 2001; Milic, 2004).

5.2.6. Suggestions to improve cooperative learning practices

Despite more positive reflections of cooperative learning, majority of pupils suggested that:

1) Cooperative skills should be improved focusing on communicative skills such as decision making and listening to others.

2) Effective rules of behavior and working discipline should be employed so that all pupils respect it in order to increase their degree of activity and contribution to group work. This is in line with Milic, (2004) who stated that the aim of group rules is to

create a working atmosphere to stimulate concentration and active work for all members.

3) Learning resources related to time, different medias and learning environment should be considered to aim towards improvement of cooperative learning. Using TV sessions, more time and opportunities for cooperative learning in all school subjects should be improved in the future. For pupils in 8th grade rearrangement of the classroom environment and application of computer media were the most important aspects to be improved due to insufficiencies of cooperative learning. Related to this, Johnsen, (2001) stated that flexibility and openness in organization of the classroom will enrich the learning environment for all pupils.

4) Teachers should increase their ability to better organize group work based on more interesting ways. In order to develop effective group process, pupils in 8th grade suggested better structured groups, more support for slow learners and teacher's involvement to "activate" the "troublemaker". Moreover, practical and investigative work should be increased in ways to surpass working on written texts.

5) Due to awareness for the importance of cooperation, pupils suggested that all persons such as teachers and parents need to practice cooperation. Pupils in 8th grade stated that teachers need to be more flexible and not so strict in ordinary class hours.

These pupils' suggestions contain important aspects on the improvement of cooperative learning both inside and outside school. Based on the peers' guided as the core of cooperative learning, Rogoff (1990) stated that child development and cognitive activities can occur in socially structured situations if it is supported by scaffolding relations. Thus, pupils' active role in learning, support and application of different tasks towards common achievement need cooperative skills to promote interaction such as assisting, helping, sharing and encouraging each others (Johnson, & Johnson, 1989). Cooperative skills are depended on pupils' training to work together. The training involves not only the children in learning the interpersonal and small group skills that facilitate cooperation, but also to ensure that their teachers understand how to establish cooperative activities in their classroom (Gillies &

Ashman, 2003). Regarding to findings, pupils recognized that their teachers are not educated enough to neither organize nor work themselves in the team. Hence, Zecic & Jeina (2006) stressed that BiH schools, according to on going educational reforms, need teachers who are educated or need to be educated for teaching process based on interactive education approach towards inclusion.

5.4. Conclusion

This study attempted to find out how pupils in a purposefully selected regular school towards inclusion from 4th and 8th grade in Sarajevo, BiH, perceived cooperative learning. In addition to the focus of the pupils' "voice" more in depth, this study tried to gain information about the same main topic from the views of pupils with a high level of mastery and pupils with different special needs. From this angle, the study focused on pupils' perceptions about cooperative learning, about themselves as member of cooperative group and about their interactions with others during cooperation.

The study has shown that cooperative learning is essential for all pupils with different learning backgrounds which benefit specifically in the areas of social emotional interactions, mediating learning and communication. The importance of such perspective of social emotional and learning environment has been emphasized by Vygotsky (1978), Rogofff (1990), Feuerstein (1979 in Klein, 2001) and Bronfrenbrenner (1979).

Furthermore, the study has shown that all pupils perceived cooperative learning as a supportive way of learning in both academically and socio emotionally. Such learning enriches their relationships based on "good" communication and cooperative skills such as trust and team building. Pupils perceived that through cooperative activities they can solve problems facilitating and mediating each other, be more creative, active, unify their interdependence and better efforts towards mutual success. It gave them opportunities to be more together, celebrate diversity of their ideas, opinions, tasks, knowledge and themselves. Although, pupils perceived cooperative learning more positively, in order to improve some aspects of cooperation, following should be

increased: skills, resource in time environment, materials and medias, working rules, teachers' skills and knowledge about cooperation and involvement of all persons in the further cooperation. This study has shown that care is a synonym of cooperative learning for fast learners and pupils with some kind of special needs in order to give and receive it. This builds their higher self concept in the light of empathy and encouragement for each other.

5.5. Recommendations

On the basis of the findings from this study, the following suggestions are forwarded for future action that could be taken into consideration to improve cooperative learning in the classroom towards inclusion in primary schools. The recommendations are based on the suggestions mentioned by all pupils from essay and interviews data.

1) This study may contribute to present pupils' voice about effectiveness of cooperative learning and raise teachers' awareness of how it is important for children's learning and wellbeing, especially for pupil with some special needs

2) Seminars, workshops and refreshment courses on how to apply cooperative learning in school and in all school subjects should be given to the teachers in order to gain more cooperative skills and knowledge

3) Teachers need to be more encouraged and supported by school staff to behave flexible and cooperative with pupils in arrangement of learning environment; application of different media in learning and as much as possible organize cooperative learning

4) Parents, school principals, teachers, all pupils and educators in general need to pay more attention to the role of cooperation in children's education in primary school by supporting cooperative policy

5) Peer mediation is of great help as it is known to benefit both the helped and the helper, but it must be well planned and practiced in supplement workshops where children could evaluate and give reflections about their cooperation

6) Pupils need to be more encouraged to cooperate and apply their friendly relationships out of school context such as home and neighborhood environment

7) For future studies I suggest that in order to go more in depth, it is advisable to add methods like observation

5.6. Epilogue: Cooperative learning in the perspective of further education

This study investigated by pupils' voice through essays and interviews how cooperative learning deserves an important place in further education on future generations of pupils. Furthermore, in comparison with pupils' status as passive listener, today it seems that pupils need to be more responsible for their own learning through active involvement and cooperation with their peers. Thus, academic knowledge is supposed to develop together with pupils' surroundings in the light of socio-constructivist characteristic. Thus, it seems that our pupils have to communicate, negotiate, cooperate and to be able to influence positive on others in order to develop their personality. The time for learning based on competition and individualism is definitely passed. Hence, in our BiH schools and wider we have to teach and prepare our pupils for working together, cooperate and support to meet diversity in the global world. Therefore, the only active learner in interaction with others can be efficient, happy and satisfied with him or herself regardless of learning abilities. Last, but not least, cooperative learning appears as a specific educational challenge for all educators in the current inclusive school settings where all of our pupils have to meet their own needs and learn with others in a welcoming and supportive environment.

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Appendices

Appendix 1E: Essay assignment (eight open ended questions)

Code_____
Class_____
Gender   M   F

Essay project: Cooperative learning and important properties

Dear pupil,
Write an essay about how you are learning together in pair or group with your classmates. You are free to write about it according to your experience with cooperative learning using these prepared questions. I hope that they will make your answers easier! Thank you for your cooperation!

1. In what kind of learning tasks are you learning together in group or pair with your classmates?

2. What does learning together mean for you when you are learning in pair or group with your classmates?

3. Please, describe how do you learn together in pair or group with your classmates!

4. What do you like with learning together in pair or group with your classmates?

5. What do you dislike with learning together in pair or group with your classmates?

6. Please, describe how you are helping your classmates when you are learning together in pair or group!

7. Please, describe how your classmates help you when you are learning together in pair or group!

8. Please, write some suggestions regarding how to improve learning together in pair or group with your classmate!

Appendix 1B : Essay assignment (eight open ended questions) Bosnian version

Sifra_____

Razred_____

Pol: M   Z

Esej projekat: Kooperativno ucenje i znacajne karakteristike

Dragi ucenice,
 napisi esej o tome kako ti ucis zajedno u paru ili grupi sa tvojim drugovima iz razreda.Pisi slobodno na osnovu svog iskustva koristeci se ovim pripremljenim pitanjima.Nadam se da ce ti ova pitanja olaksati odgovore! Hvala ti na suradnji!

1. U kojim vrstama skolskih zadataka ucis zajedno sa svojim drugovima iz razreda?

2. Sta znaci za tebe uciti zajedno u paru ili grupi sa tvojim drugovima i drugaricama iz razreda?

3. Molim te opisi kako ti ucis zajedno u paru ili grupi sa tvojim drugovima i drugaricama iz razreda!

4. Sta ti se svidja dok ucis zajedno u paru ili grupi sa tvojim drugovima i drugaricama iz razreda?

5. Sta ti se ne svidja dok ucis u paru ili grupi sa tvojim drugovima i drugaricama iz razreda?

6. Molim te opisi kako ti pomažeš drugu ili drugarici dok ucite zajedno u paru ili grupi!

7. Molim te opisi kako tvoj drug ili drugarica pomaže tebi dok ucite zajedno u paru ili grupi !

8. Molim te , napisi nekoliko prijedloga kako mozete poboljsati ucenje zajedno u paru ili grupi!

Appendix 2E : Interview guide for fast learners and pupils with some kind of special needs

Gender:

Age/Grade:

Description of pupil's ability:

How does the pupil experience and perceive learning together

1. In what kind of learning tasks are you learning together in group or pair with your classmates?

1.1. In what kind of learning situations in the classroom are you learning together with your classmates?

2. What does learning together mean for you when you are learning in pair or group with your classmates?

3. Please, tell me how do you learn together in pair or group with your classmates!

3.3. What do you do when you are learning together in pair or group with your classmates?

How does the pupil perceive him/her self as member of a cooperative group

1. How do you feel while you are learning together with your classmates in a pair or group?

2. What do your classmates expect from you while you are learning together in a pair or group?

3. What do you like with learning together in pair or group with you classmates?

4. What do you dislike with learning together with your classmates in pair or group?

5. How are you helping your classmates when you are learning together in pair or group?

5.1. Please, tell me what do you do when you are helping your classmates while you are learning together?

How does the pupil perceive interaction with others pupils in the cooperative group

1. What do you expect from your classmates when you are learning together?

2. How do your classmates help you when you are learning together in pair or group?

2.1. Please, tell me what your classmates do when they help you while you are learning together!

3. How do you communicate in the group while you are learning together?

4. How can you improve learning together in the group with your classmates?

 4.1. Please, give me some suggestions on how to improve learning together in the future!

Appendix 2B: Interview guide for fast and slow learners
Vodic za intervju sa ucenicima koji sporije i brze napreduju

Pol:

Godine starosti/razred:

Opis sposobnosti ucenika:

Kako ucenik dozivljava i opaza ucenje kroz suradnju

1. U kojim vrstama skolskih zadataka ucis zajedno u paru ili grupi sa svojim drugovima iz razreda?

1.1. U kojim situacijama ucis zajedno sa tvojim drugovima iz razreda?

2. Sta znaci za tebe uciti zajedno u paru ili grupi sa drugom ili drugaricom iz razreda ?

3. Molim te reci mi kako ti ucis zajedno u paru ili grupi sa svojim drugovima iz razreda?

3.1. Sta ti radis kad ucis zajedno u paru ili grupi sa drugom ili drugaricom iz razreda?

Kako ucenik dozivljava sebe kao clana kooperativne grupe

1. Kako se osjecas dok ucis zajedno u paru ili grupi sa drugovima iz razreda?

2. Sta tvoji drugovi ocekuju od tebe dok ucite zajedno u paru ili grupi?

3. Sta ti se svidja kada ucis zajedno u paru ili grupi sa svojim drugovima iz razreda?

4. Sta ti se ne svidja kada ucis zajedno u paru ili grupi sa svojim drugovima iz razreda?

5. Kako pomazes svojim drugovima iz razreda kada ucite zajedno u paru ili grupi?

5.1. Molim te reci mi sta ti radis kada pomazes drugovima iz razreda dok ucite zajedno u paru ili grupi?

Kako ucenik dozivljava interakcije sa drugim ucenicima u kooperativnoj grupi

1. Sta ocekujes od svojih drugova dok ucite zajedno u grupi?

2. Kako tebi pomazu tvoji drugovi iz razreda dok ucite zajedno u paru li grupi?

2.1. Molim te reci mi, sta tvoji drugovi iz razreda rade kada ti pomazu dok ucite zajedno u paru ili grupi?

3. Kako razgovarate u grupi dok ucite zajedno?

4. Molim te reci mi nekoliko prijedloga kako mozete poboljsati ucenje zajedno sa svojim drugovima iz razreda u buducnosti?

Appendix 3E: Adapted interview guide for Sana- a pupil with substantial special needs

How does the pupil experience and perceive learning together

1. What do you do in your group in school with X or Y?

1.1. How does X or Y help you when you receive some task to do in school?

2. What do you do with X or with somebody else in your group?

2.1. Please, can you tell me a little bit about it!

3. What they let you to do in the group?

3.1. Do you remember how it was with your class teacher?

3.2. Please tell me little bit about it!

How does the pupil perceive him/her self as member of cooperative group

1. How do you feel when you are working with X or Y?

2. What does X tell you while you are working together?

2.1. How does X or Y say you to do something?

3. What do you like best with working together with X and Y?

4. What do you dislike with working together with X and Y?

5. Do you sometimes help X or Y?

5.1. What do you do to help X or Y?

How does the pupil perceive interaction with others pupils in the cooperative group

1. What would you like that X or Y do for you?

2. When you are with your classmates in the group, do they help you?

3. What do they do to help you?

4. Do you have some ideas on how it would be better when you are working together with X or Y and other classmates in the group?

Note: X and Y are Sana's close classmates. Her class teacher asked her linking names of her classmates to concrete working situations.

Appendix 3B: Adapted interview guide for Sana- a pupil with substantial special needs

Kako ucenik dozivljava i razumije ucenje kroz suradnju

1. Sta radis zajedno sa X ili Y u vasoj grupi u skoli?

1.1. Kako ti X ili Y pomazu kad dobijes neki zadatak u skoli da uradis?

2. Kad radis sa X u grupi i sa jos nekim , sta ti radis?

2.1. Mozes li mi to malo ispricati?

3. Sta oni tebi daju da radis?

3.1. Sjecas li se kako je to bilo kod uciteljice?

3.2. Malo mi to ispricaj?

Kako ucenik dozivljava sebe kao clana kooperativne grupe

1. Kako se osjecas kad radis nesto sa X ili Y?

2. Sta ona tebi obicno kaze dok radite zajedno?

2.1. Kako ona tebi kaze da uradis nesto?

3. Sta najvise volis kada radis nesto zajedno sa X i Y?

4. Sta ne volis kada radis nesto zajedno sa X i Y*?*

5. Da li ti nekada nesto pomognes X ili Y?

5.1. Sta ti radis kada pomazes X ili Y?

Kako ucenik dozivljava interakcije sa drugim ucenicima u kooperativnoj grupi

1. Sta bi ti volila da X i Y tebi rade?

2. Kad si sa svojom djecom u grupi da li ti oni pomazu ?

3. Sta oni tebi rade kada ti pomazu ?

4. Imas li ti neki prijedlog kako bi bilo jos bolje kada nesto radis sa X iY i sa

   drugom djecom u grupi?

Napomena: X i Y su Sanini drugovi iz razreda.Uciteljica je postavljala pitanja povezujuci ih sa imenima drugova s kojima Sana radi nesto zajedno u konkretnoj situaciji

Appendix 4: Letter from the Department of Special Needs Education, University of Oslo

**UNIVERSITY
OF OSLO**

Department of Special Needs Education

P.O.Box 1140, Blindern
N-0318 Oslo
NORWAY

Your ref:
Our ref: 13/06 BHJ/db
Contact person: Denese Brittain d.a.brittain@isp.uio.no

Visiting address:
Helga Eng's Building
3rd and 4th floor

Date: June 21. 2006

Telephone: + 47 22 85 80 59
Telefax: + 47 22 85 80 21

FACULTY OF EDUCATION

TO WHOM IT MAY CONCERN:

This is to certify that **DŽEMIDŽIĆ, Selma,** date of birth 07.08.1973, is a full-time student pursuing a course of study at the Department of Special Needs Education at the University of Oslo, Norway, leading to the degree of Master of Philosophy in Special Needs Education (M. Phil. SNE).

This is a continuous two-year programme run on the "sandwich" principle, which involves periods of study and field work/research in both Norway and the home country. The student has concluded the initial 11-month period in Norway and will be returning to the home country in July 2006 to continue full-time studies/research until 1 January 2007 when s/he returns to Norway for the final part of the degree. The period of study will be completed at the end of May 2007.

The main responsibility for supervising the research, developmental work and thesis remains with the Department of Special Needs Education, University of Oslo, Norway. However, we would kindly request that the relevant authorities give the student the access required to the schools and educational establishments necessary in order to undertake field work and research. We would also be most grateful for any assistance that is afforded to the student which enables her/him to carry out this work, particularly the use of facilities such as access to telephone, fax, e-mail, computer services and libraries at the various educational establishments.

Yours sincerely

Associate Professor Berit Helene Johnsen (dr.scient.)
Academic Head of International Master's Programme
Department of Special Needs Education

Department of Special Needs Education
Faculty of Education
University of Oslo, Norway

Institutt for spesialpedagogikk
Det utdanningsvitenskapelige fakultet
Universitetet i Oslo
Norge

Appendix 5: Permission for research study from Ministry of Education in BiH

Bosna i Hercegovina
Federacija Bosne i Hercegovine
KANTON SARAJEVO
Ministarstvo obrazovanja i nauke

Bosnia and Herzegovina
Federation of Bosnia and Herzegovina
CANTON SARAJEVO
Ministry of education and science

Broj: 11-04-38-27975/06
Sarajevo, 12.10.2006. godine

SELMA DŽEMIDŽIĆ
Sarajevo, Trg solidarnosti 35/5

PREDMET: Saglasnost za provođenje dijela istraživanja u JU OŠ "Džemaludin Čaušević", u okviru izrade magistarskog rada na Univerzitetu u Oslu, Norveška

Poštovana,

Ovim putem *daje Vam se saglasnost* za provođenje dijela istraživanja u JU OŠ "Džemaludin Čaušević", kako je navedeno u Zahtjevu.

Naučno istraživanje se provodi u okviru postdiplomskih studija za sticanje diplome magistra filozofije u specijalnim potrebama u obrazovanju (Master of Philosophy in Special Needs Education).

Ulazak u škole je moguć samo uz prezentaciju odobrenja, a istraživanje se vrši na dobrovoljnoj osnovi.

Molim da mi nakon realizacije istraživanja, dostavite Izvještaj o rezultatima istog.

S poštovanjem,
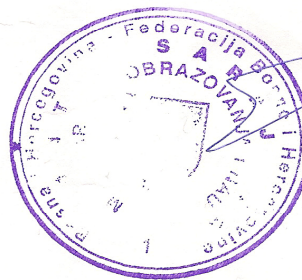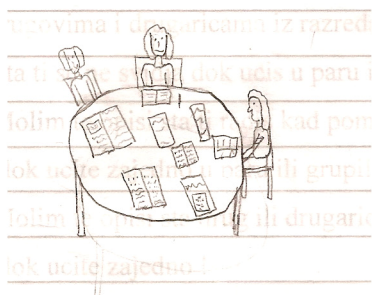
MINISTAR
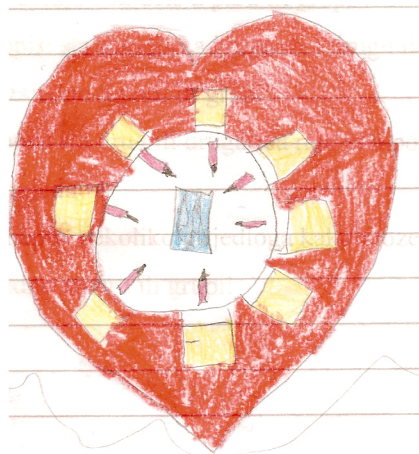Doc. dr Emir Turkušić

Dostavljeno:
1. Naslovu
2. A/a

www.ks.gov.ba Tel: ++ 387 (0)33 562-128, Fax: 562-218, cent.: 562-000/2128
71 000 Sarajevo, Reisa Džemaludina. Čauševića 1

Appendix 6: Pupils' drawings of cooperative learning in 4th grade

Picture 1.

Picture 2.

Picture 3. Friendship

Appendix 7: Overview of main categories and subcategories displayed through tables related to eight arenas

Appendix 7.1. Arena "Cooperative learning tasks"

Main categories	4th grade	8th grade
Level 1	Level 2	Level 3
1. School subjects	1.1.Bosnian language 1.2.Nature and Society	1.1.Bosnian language 1.2.Geography 1.3.History
2. Activities	2.1.Practical 2.2.Intellectual 2.3.Creative	2.1.Practical 2.2.Intelectual 2.3.Creative
3. Innovative learning techniques-methods	3.1.RWCT	3.1.RWCT
4. Teaching and learning aids	4.1.Natural materials	4.1.Computer techniques 4.2.Internet
5. Outside school learning	5.1.Home 5.2.Playground	5.1.Home 5.2.Nature

Table 1: The overview of the categories and subcategories in arena "Cooperative learning tasks"

Appendix 7.2. Arena "Meaning of cooperative learning"

Main categories	4th grade	8th grade
Level 1	Level 2	Level 3
1. Knowledge	1.1.General view of knowledge	1.1.General academic view of knowledge
2. Group learning process	2.1.Interpersonnal interaction 2.2. Support 2.3. Circumstance	2.1.Interpersonnal interaction 2.2. Support 2.3. Circumstance
3. Friendship	3.1.Friendly love	3.1.Sociall skills based on friendship relations
4. Feelings	4.1. Positive basic feelings	4.1. Positive deeper filings

Table 2: The overview of the categories and subcategories in arena "Meaning of cooperative learning"

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Appendix 7.3. Arena "The Cooperative process"

Main categories	4th grade	8th grade
Level 1	Level 2	Level 3
1. Group learning process	1.1.General view of working process 1.2. Rules	1.1. Structure of working process 1.2. Manner of working process
2. Activities	2.1. Creative activities 2.2.Play	2.1.Creative activities 2.2. Principle in working process 2.3. Roles in working process
3. Support	3.1.Friendly interpersonal relations	3.1. Effective working relationships
4. Communication	4.1.Rules in communication	4.1. Skills in communication

Table 3: The overview of the categories and subcategories in arena "The Cooperative process"

Appendix 7.4. Arena "What pupils do like with cooperative learning"

Main categories	4th grade	8th grade
Level 1	Level 2	Level 3
1. To be together	1.1. Interpersonal dynamic 1.2. Celebrating diversity	1.1. Interpersonal dynamic 1.2. Celebrating diversity
2. Working atmosphere	2.1. Cooperative behavior 2.2. Opportunity for cooperation 2.3. Creativity	2.1.Oppotunity for cooperation 2.2. Group success 2.3. Creativity
3. Likeable traits	3.1. Social 3.2. Moral	3.1. Intellectual 3.2. Emotional
4. Care	4.1.General view of care	4.1. Peer mediation 4.2. Outside classroom care

Table 4: The overview of the categories and subcategories in arena "What pupils do like with cooperative learning"

Appendix 7.5. Arena "Dislikes of the cooperative learning"

Main categories	4th grade	8th grade
Level 1	Level 2	Level 3
1. Lack of discipline	1.1. General view of noise	1.1. Disturbed working atmosphere 1.2. Behavior
2. Self-oriented pupils	2.1.Individual oriented work 2.2. Negative personal traits	2.1.Negative personal traits 2.2. Troublemaker
3. Group composition	3.1.Unbalanced working relations	3.1.Not well structured groups 3.2. Inter group competition
4. Non communicative skills	4.1.Quarelling	4.1. Squabbling 4.2. Non listening skills
5. Other aspects	5.1.More distant from this arena	5.1. Critical oriented

Table 5: The overview of the categories and subcategories in arena "Dislikes of the cooperative learning"

Appendix 7.6. Arena "Helping others during cooperative learning"

Main categories	4th grade	8th grade
Level 1	Level 2	Level 3
1. Intentions	1.1. General view of helping 1.2. Goals in helping	1.1. Deeply view of helping 1.2. Goals in helping
2. Helping strategies	2.1. General view of strategies 2.2. Helping actions	2.1.Personal developed system 2.2. Learning environment 2.3. Principles of helping 2.4. Helping tools 2.5. Organization of help
3.Assesment	3.1. Pupil's needs	3.1. Assessment of personal needs 3.2. Assessment own abilities

Table 6: The overview of the categories and subcategories in arena "Helping others during cooperative learning"

Appendix 7.7. Arena "Help from others during cooperative learning"

Main categories	4th grade	8th grade
Level 1	Level 2	Level 3
1. Needs	1.1. Academic needs 1.2. Borrowing 1.3. Life situations	1.1. General view 1.2. Individual's need 1.3. Group's need
2. Helping manners	2.1. Academic content in school subjects 2.2. Life situations	2.1.Peer guidance 2.2. Communication manners
3. Relationships in helping	3.1. Face to face relations 3.2. Indirectly way	3.1. Face to face relations 3.2. Relationships based on feelings
4. General view	4.1. Readiness in helping	4.1. "To be together" in helping

Table 7: The overview of the categories and subcategories in arena "Help from others during cooperative learning "

Appendix 7.8. Arena "Improvement of cooperative learning"

Main categories	4th grade	8th grade
Level 1	Level 2	Level 3
1. Skills	1.1. Communicative skills 1.2. Self concept	1.1. Communicative skills 1.2. Personal traits
2. Group rules	2.1.Working atmosphere 2.2. Personal behavior	2.1.Working atmosphere 2.2. Personal behavior
3. Learning resources	3.1. Medias 3.2. Group work in all subjects	3.1.Time 3.2. Learning environment 3.3. Medias 3.4. Group work in all subjects
4. Group process	4.1. Teacher's better planning 4.2.Individual better contribution	4.1. Better formation of the group 4.2. Teacher's more activating 4.3. More support for slow learners
5. Cooperation for all	5.1. Teachers 5.2. Parents	5.1. Teachers' s flexibility 5.2. Connections between subjects

Table 8: The overview of the categories and subcategories in arena "Improvement of cooperative learning"