Formation of Collaborative Skills of Adolescents Who Have Functional Disorders
Olga Urtane, Svetlana Usca, Velta Lubkina

Personality Socialization research institute of Rezekne Higher Educational Institution, Rezekne, LV4600, Latvia

Abstract

One of the main prerequisites of successful social development is collaborative skills. Study focuses on adolescents with functional disorders, whose collaborative skills are underdeveloped. There has been raised the issue on how to promote the development of those skills within boarding school educational process, applying a project method to encourage adolescents with functional disorders to use the obtained knowledge and skills in practice, to understand the significance of process, to take an active role in problem-solving process, and gain positive experience of cooperation. The research was conducted in Latvia, in two boarding schools. Results have been processed in SPSS and AQUAD 6 environment. It is concluded that the usage of the project method while working with adolescents with functional disorders provides an individual and differentiated approach and the opportunity to work at all cognitive levels and to participate in problem-solving and decision-making processes thus promoting active living position and developing collaborative skills in boarding school conditions.

Keywords: adolescents with functional disorders, collaborative skills, project method.

1. Introduction

Education policy focuses on development of each individual's personality, so that he/she could realize self-actualization in specific cultural environment and be ready for continuous self-development (Valbis, 2005; Ramsey, 2004; Guskey, 2002). In contemporary knowledge and multicultural environment it is continually essential to have ability to respond different situations, to evaluate them and find the ways how to enhance cooperation between communication partners by learning and using the acquired technologies in order to develop cultural environment. The dominating hope, that the new generation will be able to adapt and operate in a rapidly changing life, it affects work of educational institutions. This also applies to special education which is obtained by adolescents with different types of functional disorders.

"Education Law" (1998), "Children's Rights Protection Law" (1998), "The General Education Law" (1999) and other laws and regulations provide Latvian students who have disabilities with the opportunity to obtain education.
taking into consideration their needs. There are offered two opportunities - to obtain education in special schools and integration in comprehensive educational institutions (Usca, 2012).

In Latvia there has been increasingly emphasized the reorientation of the knowledge reproduction need to develop students collaborative skills which are essential for a successful collaboration in society, because even excellent knowledge does not benefit if a person cannot take part in the exchange of ideas and information (Denny, 2002). The need to develop collaborative skills is required by the socio-economic situation and demands of common labour market.

Education in boarding-schools is obtained according to a specially developed curriculum taking into consideration the needs of students who have functional disorders. After leaving boarding school it is possible to continue education in other schools. There is provided a regular expert advice, all teachers are well-trained to work with disabled students and in all subjects and extracurricular activities teachers focus on correction work. Despite the favourable conditions for correction of disabilities, there is a problem in boarding schools: students are in a kind of isolation, detached from the real life, therefore they lose motivation to acquire the necessary cooperation and life skills; they are away from their families and their parents do not take part in children’s daily life (Usca, 2012).

The research focuses on adolescents with functional disorders which are not related to inherited intellectual disabilities. These students usually have lack of learning motivation, poorly developed or semi-developed learning abilities and skills, and inability to work independently; they do not have interest in self-development (Reed, 2004; Shilova, 2005; Borodulina, 2004; Felsenfeld et al., 1994). As a result, if a student does not receive professional assistance in time, the primary disorder causes secondary disorders, and as well intellectual and social disturbances (Trofimova, Dubanova, Trofimova, & Pushkina, 2006; Borodulina, 2004). These teenagers mostly come from social risk families. During their studies students spend most of their time in school, where they learn and live in a boarding house and their everyday life is pedagogically organized. In this situation there is no need for self-reliance to make a decision, and that is why there appears inability (later - unwillingness) to take personal responsibility for the events of everyday life. Life in boarding school limits as well the range of communication partners; therefore adolescents have poorly developed collaboration skills and lack of tolerance. This creates a threat to their ability to act independently and socialize in future (Usca, 2012).

The issue of the research is how to enhance the development of collaborative skills for adolescents with functional disorders in boarding school’s pedagogical process?

2. Methodology

Social development of each person depends on economic, political and social development of society, the character of social actions to be implemented, an interaction system, acquisition of social experience and its active usage that is put into effect through communication and collaboration (Dushkov, 1999).

The authors believe that one of the main prerequisites for successful social development is collaborative skills. This skill gives individuals the chance to use their own experience while setting goals, to learn from each other concerning the choice of means, and it helps to develop the awareness that they can express their opinion and can be accepted while acting in the group. It is the way how to learn to take care of each other, to be responsible for the group's overall performance, to form human and emotional relationships with others. In a cooperative activity there appears an interest and the ability to take responsibility for themselves and others (Rean, Bordoiskaya, & Rozum, 2008). Cooperation is also a form of gaining experience, the development of self improvement by acquiring new knowledge and skills (Spona, 2006), and as a result there is a formation of mutual influence and mutual understanding (Maslo, 1995).

Basing on personal observations, the authors conclude that adolescents with functional disorders have underdeveloped or even undeveloped collaboration skills. There are several reasons: a negative previous sample, a negative experience of previous cooperation, type of disorders, a lack of cognitive activity or even intellectual passivity, inability to comply with the principles of causality and inadequate assessment of own actions and the work of others.

In order to develop collaborative skills it is necessary to involve adolescents with functional disorders in the learning development process, when there are created situations where active application of knowledge is favoured. While learning to apply knowledge in a meaningful, significant way, students become active participants and
promoters of their own learning process (Steiner et al, 1999). Learning or finding the sense takes place in a social context, therefore a social interaction has a key role in education (Vygotsky, 1999), because working together, students can achieve more than doing the task alone (Fisher, 2005). It is necessary to develop a set of learning techniques, which focuses on disabled adolescents. There should be set targets and tasks which would encourage to apply critical approach and make teenagers assess and work together to solve problem tasks, leading each other through learning process instead of simply reproducing the information or knowledge (Koppenhaver, 2006). Expertly organized project work opens the opportunity to implement this set of individual techniques; distinguishing pupils' individual learning trajectories, there appears the necessity to develop them into diverse relationships with other communication partners (Simons & Masschelein, 2009). It is also an orientation to the nearest development zone of an adolescent with functional disorders (Vygotsky, 1999), so that a student can focus on overcoming difficulties and lessen his intellectual passivity (Shilova, 2005).

The project method is one of the interactive teaching methods which plays a significant role in the process of reaching education goals and it promotes the organization of self-directed learning in special education. Using this method there is ensured synergy between learning in lessons and extra-curricular activities. Researches (Mahoney et al., 2003; Moriana et al., 2006; Carrol & Purdie, 2007; Caldwell & Smith, 2005; Pimapunsri et al., 2010; Kaufman & Gabler, 2004) demonstrate that the project work enhances obvious improvement in students’ study achievements and interpersonal communication, the formation of critical thinking and the development of personal and social maturity, socialization, learning motivation, development of self-regulation, which also includes self-control, implementing different strategies while setting and achieving goals. As a result there is a reduction of the gap between the areas of knowledge gained in school and real life. Moreover, it is obvious that there is a positive impact of collaborative skills on learning results that are usually not achieved by the traditional frontal teaching methods. (Cianciolo et.al, 2001).

When working with adolescents with functional disorders the main goal of the project method is to encourage students to use the acquired knowledge and skills in practice while realizing teaching and learning interaction (Prudnikova, 2012), to understand the importance of the process, to learn to take an active position in mutual cooperation while solving problems, and to gain a positive experience of cooperation.

Implementing the project method, there is an interaction where the attention is paid to social and cultural relations which affect each individual in learning process (Выготский, 1999; Newman, Griffith, & Cole, 1986; Wertsch, 1985; Garleja, 2006).

Participants involved in this process have common goals to achieve, unity of action, mutual responsibility and accountability for their performance. As a result, adolescents with functional disorders become active participants of the learning process- they learn to solve problems and make decisions, develop collaboration skills with interaction partners, learn to assess the results of their own learning and the work of others, and act at all cognitive levels.

3. Results

The aim of the research is to find out how the project method enhances the development of collaboration skills of adolescents with functional disorders.

The research was conducted in two special boarding schools of Latvia. The choice was made taking into consideration the following factors: firstly, in both boarding- schools there are adolescents with functional disorders which are not inherited intellectual disabilities, but in one case - language disorders, in another case - mental disorders; secondly, students from social risk families (Usca, 2012); thirdly, the schools are located in the same region thus having cultural similarities; fourthly, a small distance between the chosen schools makes the research process much easier.

58 adolescents with functional disorders, 33 pedagogues and one psychologist were involved in the research.

In the first stage there was analysed adolescents’ with disabilities and teachers' attitude towards various types of learning activities in study organization process. 83 respondents were interviewed. The results demonstrate that in 34 cases, respondents prefer individual work (25 adolescents with functional disorders and 9 teachers), in 15 cases the preference is given to frontal work. For other types of work, such as group work, pair work, project work, there is given less support. The authors believe that individual and frontal work provides learning process, individualization and differentiation, but does enhance the development of collaborative skills.

The second phase of the research was done to find out how students and teachers assess the opportunity to acquire collaboration skills in boarding school conditions, therefore there was conducted a survey. 32 teachers and 50 adolescents with functional disorders were interviewed. The obtained results demonstrate that more than a half of
adolescents with functional disorders feel that they are able to listen, to ask for advice, to cooperate with others and accept different opinions of others.

The contingent of the surveyed adolescents with functional disorders is specific and it is influenced by their individual character and life in boarding school because their everyday life is pedagogically organized and there is no need to solve problems independently and make responsible decisions. In the result - they are unable to assess themselves adequately, and there is increased self-assessment of communication and working skills. This is contrary to the teachers’ opinion. Only 12.5% (4 cases) of teachers approved students' collaboration skills, but 31.3% (10 cases) have given a negative assessment.

Whereas any assessment has the moment of subjectivity, the authors admit that an objective assessment could be the average result of students' and teachers' ratings. This demonstrates that the average rate is not high and there is need to seek appropriate ways and means to enhance the development of disabled adolescents’ collaboration skills.

In addition, Pearson correlation demonstrates that there is a close correlation between the mentioned skills: there is maximally significant correlation between the ability to listen and the ability to accept the viewpoints of others ($r = 0.493 \, **$, $p = 0.000$), the ability to listen and the ability to ask for advice ($r = 0.888 \, **$, $p = 0.000$), the ability to listen and the ability to work together ($r = 0.459$, $p = 0.001$), the ability to accept different opinions and the ability to ask for advice ($r = 0.561$, $p = 0.000$). Consequently – developing one ability, there will be promoted the development of correlated abilities.

In the third stage of the research there was established a group of eight adolescents with functional disorders. The project method was applied in the work with students with functional disorders. It opened the opportunity to provide a more personalized and differentiated approach taking into consideration the disabled adolescents’ needs and synthesize it with a practical application of the gained knowledge while solving problems and making decisions. It provided the room for teenagers to teach and learn from each other. Mutual assistance, cooperation or even positive spirit of competition led to higher results.

Within a three- year period there was organized an actively developing learning process. Adolescents were regularly and purposefully involved in various projects organized both in boarding school and outside, by attracting new collaboration partners. Whereas adolescents with functional disorders have cognitive and communication disorders (Borodulina, 2004, Trofimova et al., 2006) the implementation of the project method in pedagogical process had three phases:

- in the first phase a teacher participated as an equal participant of the project, carried out his/her duties; he/she analyzed students' work, as well as allowed to be analyzed; by his/her own example demonstrated how and what action had to be taken;
- in the second phase a teacher was an active observer, ready to provide the necessary support as a consultant and advisor, sometimes even in the cases when the student had not realized the error yet;
- in the third phase of the project participants planned the actions independently and took responsibility for the results. They could turn to the teacher as a consultant, but it was their own initiative.

In order to determine the changes, there was done an analysis on questionnaires and creative works of adolescents with functional disorders to acquire the necessary data. Attention was paid to the assessment of skills and tolerance, because in the authors’ opinion, without the ability to accept different opinions, the cooperation in different contexts is under the risk.

The questioning of adolescents with functional disorders and experts who were involved in the research process was done at the beginning and at the end of the research. At the beginning of the research there was done the assessment of collaboration skills of adolescents with functional disorders, but teachers’ and adolescents’ assessments were statistically different ($p = 0.001$) in tolerance assessment. There are statistically significant differences in cooperation skill assessment ($p = 0.049$). In both cases, adolescents’ self-assessment (Mean Rank 18.69 and 16.06) is higher than teachers’ assessment (Mean Rank 9.41 and 10.72). At the end of the research statistically significant differences were no longer observed. It demonstrates that adolescents with functional disorders, when faced with real life situations where it is necessary to collaborate in decision-making process, begin to assess their skills more adequately.
Analysing the development dynamics, there have been found significant differences between the measurements in collaboration (p = 0.000) and highly significant differences in tolerance (p = 0.007). Adolescents with functional disorders have improved their collaboration skills and the ability to accept different opinions.

The analysis of students' creative work in AQUAD 6 environment proves that frequency of the use of denotative multiple code "tolerance" that includes the ability to accept other opinions has increased from 1 to 7 times at the end of the research, while the frequency of the use of collaboration denotative multiple code "Coop" has increased from 9 times at the beginning of the research up to 34 times at the end of the research. This demonstrates that the results are valid and suggests that regular and purposeful use of the project method enhance the development of disabled adolescents’ collaboration skills.

4.Conclusions

1. The development of adolescents’ with functional disorders collaborative skills is affected by the definite disorder, a cognitive activity, parents’ sample, previous cooperation experience, and other factors.
2. Working with adolescents with functional disorders in boarding schools there are mainly used individual and frontal work methods. It provides the acquisition of knowledge, individualization and differentiation, but does not develop collaboration skills.
3. Adolescents’ with functional disorders assessed their cooperation skills and the results are contrary to the teacher's assessment. Any assessment has the moment of subjectivity. An objective assessment could be the average result of students 'and teachers' ratings. The results demonstrate that it is not high.
4. In the analysis of collaboration skills there is a correlation between the ability to listen and the ability to accept the viewpoints of others (r = 0.493 **, p = 0.000), the ability to listen and the ability to ask for advice (r = 0.888 ** p = 0.000), the ability to listen and the ability to work together (r = 0.459, p = 0.001), the ability to accept different viewpoints and the ability to ask for advice (r = 0.561, p = 0.000).
5. In order to develop disabled adolescents’ collaborative skills, they should be involved in the learning process when there are created situations where an active application of knowledge is favoured. Such situations may be created using the project method.
6. The project method provides the implementation of socio-cultural interaction. When working with adolescents with disabilities there is provided an individual and differentiated approach. It gives the opportunity to work at all cognitive levels and participate in problem-solving and decision-making process, promoting the development of collaborative skills in boarding school conditions. This is demonstrated by data analysis in SPSS program, presenting the measurements of significant differences at the beginning and at the end of cooperation (p = 0.000) and highly significant differences in the ability to accept different viewpoints (p = 0.007), and increased incidence of multiple codes, analysing a creative work in AQUAD 6 environment.

Acknowledgements

This work has been supported by the European Social Fund within the project „Support for Doctoral Studies at Rezekne Higher Education Institution”. Nr. 2009/0161/1DP/1.1.2.1.2/09/IPIA/VIAA/007

References

Bluka, I., & Rubana, I.M. (2002). Dzīvesprasmju apguve skolā. Rīga: SIA Nacionālais apgāds.
Borodulina, S. Ju. (2004). Korreksionnaya pedagogika: psikhologo-pedagogicheskaya korrektshi v razvitii i povedenii shkolnikov [Correctional pedagogics: Psychological and pedagogical correction of deviations in development and behaviour of schoolchildren]. Rostov na Donu: Feniks.
Caldwell, L., & Smith, R. (2005). Participation in school-based extracurricular activities and adolescent adjustment. Nancy Darling. Journal of Leisure Research, 37, 51-76.
Carroll, A., & Purdie, N. (2007). Extra-curricular involvement and self-regulation in children. The Australian Educational and Developmental Psychologist, 24, 19 – 35.
Cianciolo, P., Henderson, T., Kretzer, S., & Mendes, A. (2001). Promoting collaborative learning strategies in aging and public policy courses. Gerontologist and Geriatrics Education, 22(2), 47–67.
Denejs, R. (2002). Prasme sasinātās un uzstādītās. Rīga:Jāņa Roizes apgāds.
Dushkov, B. A. (1999). Psihologiya tipov lichnosti [Psychology of personality types]. Yekaterinburg: Delovaya kniga.
Garleja, R. (2006). Cilvēkpotenciāls sociālā vidē. Rīga: RaKa.
Geidžis, N.L., & Berliners, D.C. (1999). Pedagogiskā psiholoģija. Rīga: Zvaigzne ABC.
