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# SUSTAINABLE DEVELOPMENT IN SCHOOL IN THE CONTEXT OF DEVELOPING SOCIAL SKILLS – PRACTICAL IMPLICATIONS

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**Abstract:** Education for Sustainable Development is one of the most important areas of education both in Poland and all over the world. It is not only related to the development of pro-environmental attitudes towards nature, but also to shaping the competences of the future, needed for satisfying functioning in daily life with other people. Social competence deserves attention in this respect and is worth developing in young people from the earliest age – in kindergarten and school. In the contemporary world, where soft competences become important (including the ability to cooperate, work in a team, build healthy relationships or solve various types of problems), shaping and strengthening these competences are key tasks for contemporary teachers. This article points to some interview research results that show both possibilities of using activating methods for teachers in their everyday work with children and youth (so as to prepare them for later life stages) and limitations of using them from the teachers' point of view.

**Keywords:** Education for Sustainable Development, social skills, key competences for sustainable development, methods and forms of work with children and youth.

### 1. Introduction

Nowadays, in the era of dynamic civilisation progress and a high level of computerisation of the world, it would seem that a human being wields power over life on Earth. Broadly understood technological progress provides all sorts of amenities, and the above-mentioned achievements make life easier in certain aspects. In others, however, these changes, which take place on many levels (i.a. in the economic, social and cultural sphere), generate various difficult situations that both humanity (in the global dimension) and individual people (in the individual dimension) have to deal with. Currently, important and urgent problems to solve are observable: very fast environmental degradation, irresponsible natural resource management and many direct human-against-nature type of actions, which bring far-reaching – unpleasant in essence – consequences for present and future generations. In view of the undoubted successes of

civilisation, which have been lasting since the industrial revolution of the late 19th century, relatively recently people have noticed their abuse of nature and harmful, devastating actions against it. Currently, there is an open discussion about the climate and environmental disaster in both scientific circles and public opinion. The necessity to take decisive actions leading to a change in politics and economy is postulated so that the negative consequences of human behaviour can be stopped. Postmodernism, globalisation and turbo-capitalism also pose serious problems, the essence of which is the postulate that "society is to serve the economy". According to Edward Luttwak (Luttwak, 2000), it leads to the collapse of society into a small elite of winners, an enormous amount of losers of varying degrees of wealth or poverty, which is associated with increasing social stratification and unequal access to all sorts of goods or services. There are also social and cultural changes related to radical technological changes, which, in turn, affect changes in communication (such as the ability to communicate via the Internet, regardless of time and space). Metamorphosis of perception, cognitive processes (Hull, 2011) and universal access to unlimited information resources make it necessary to develop skills related to critical, analytical thinking and to make quick, accurate choices and decisions. Therefore, the changes currently taking place in the world concern the functioning of human being in every field – both on a macro (politics, economy, world and economy of particular countries) and micro (daily functioning of human in social and cultural life) level. As Jan Łaszczyk emphasises, they have different dimensions and different weight. Human is involved in these changes, in the magnitude of daily choices, the need to make many decisions as well as various social relations, which are also often subject to various transformations. In this context, human's abilities to meet subsequent emerging challenges as well as the ability to generate civilisation progress have become valued in the social and individual dimension (Łaszczyk, 2009).

In view of the outlined urgent problems of modern times and the challenges facing societies around the world, the requirements formulated for social institutions – including kindergartens, schools and teachers working there – have resulted in the need to seek effective solutions in three areas of human activity: social, economic and environmental protection. The need arose to develop assumptions for an effective concept of sustainable development and education that will prepare next generations for its implementation.

### 2. The idea of sustainable development

The idea of sustainable development of societies appeared in the second half of the 20th century, i.e. when the representatives of international political organisations and scientific communities have attempted to develop a comprehensive action plan related to responsible, harmonious functioning of people in the modern world, who respect others and, more

importantly, are in harmony with nature. According to this idea, the actions of people were and are constantly concentrated on the sake of the environment and human, and they harmoniously lead humanity to the responsible and rational use of Earth's natural resources as well as to the harmonious coexistence of representatives of various nations and cultures (Borys, 2009; Pakulska, Poniatowska-Jaksch). As Włodzimierz Tyburski points out, sustainable development aims to revise both the ways of thinking and programmes setting the current direction of development. The category of sustainable development is focused on developing such a vision of the future in which it will be possible to overcome the threat to human well-being and cease the processes that are a violation of the existential foundations of humanity. It is also associated with the reorganisation of the model in force in the world, involving unlimited consumption growth, generating numerous inequalities, social, environmental and economic conflicts, as well as negatively affecting the natural world (Tyburski, 2011).

It can be assumed that first activities related to the development of the concept of sustainable development began at the beginning of the 1960s, when the need for social debate on ecology was recognised. The stimulus was the book *Silent Spring* by Rachel Carter, published in 1962, whose main topic was the relationship between the intensive use of large amounts of mercury in agriculture and the extinction of the local population of a yellowhammer. In subsequent years, international conferences were organised, during which the issues related to environmental protection were considered as a basic task of each state ("Only One Earth" conference, Stockholm, 1972). Education was recognised as a priority action supporting sustainable development (conference in Tbilisi, 1977). In 1983, the World Commission on Environment and Development (known as the Brundtland Commission) was established and the definition of sustainable development appeared for the first time in the Our Common Future report, published in 1987. One of the most important conferences leading to the development of a comprehensive model of sustainable development was the UN Conference Environment and Development, organised in June 1992 in Rio de Janeiro, during which representatives of 179 countries of the world agreed on the need to change the contemporary economic policy and the relationship between the human economy and environment in order to save the Earth and maintain the safe existence of future generations. Many important documents were prepared at that time, which became the basis for the initiation of a new policy and implementation of the already formulated one (including the Rio de Janeiro Declaration on Environment and Development or the Agenda 21 document, in which chapter 36 was devoted to education) (Mróz, 2018). At the Johannesburg Summit 2002, Education for Sustainable Development was prioritised and its widespread implementation was supported in the same year by the United Nations General Assembly. The Decade of Education for Sustainable Development (DESD) lasted from 2005 to 2014 and was supervised by UNESCO. The purpose of the undertaking was to implement a vision of a world in which all people will be able to benefit from highquality education allowing them to assimilate the knowledge, behaviour, values and attitudes necessary to ensure sustainable development and positive social transformation. The purpose

of introducing DESD was to make Education for Sustainable Development an obligatory model of education in schools and other educational institutions, in order to emphasise the central role of teaching and learning in the joint pursuit of sustainable development. The highest quality of Education for Sustainable Development is a prerequisite for all levels of education and in all areas of the educational process (Mróz, 2018). In June 2012, representatives from over 100 countries met at the next Earth Summit in Rio de Janeiro ("Rio +20"). This meeting ended with the adoption of the document The Future We Want. The Summit highlighted the importance of a three-faceted approach to the issue of sustainable development, taking into account the interrelationship of three areas: social, economic and environmental. It was decided to define a set of universal Sustainable Development Goals after 2015, closely related to the state of implementation of the Millennium Development Goals. In September 2015, the 2030 Agenda for Sustainable Development was held at the UN headquarters in New York and the document Transforming our world: the 2030 Agenda for Sustainable Development, containing 17 Sustainable Development Goals, was adopted at that time. One of these goals is the provision of inclusive and qualitatively good education and the creation of lifelong learning opportunities for all people. Important tasks are also associated with the formation of such a development model that guarantees all people respect, equal opportunities regarding the full development of one's own potential and participation in common well-being, as well as the development of cooperation skills both on an individual, institutional and national level. The document guarantees also the equal rights for women. Citizens of the world should become responsible (sustainable) consumers, caring about how the goods and services they use have been produced (the postulate of sustainable production and consumption models). The rational use of all natural resources is also a key issue. The issues that representatives of various countries and international organisations dealt with during the above-mentioned summits and conferences cover all areas or spheres of human life on Earth and they are global. Therefore, the concept of sustainable development can be described as multifaceted, comprehensive and integrated. Sustainable development refers to a number of sciences, including social sciences, and its basic goal is to balance basic elements of the system shaping the future of human society on Earth, i.e. the environment, society and economy, so that the development of one element does not pose a threat to others. That is why sustainable development is discussed in economic, social (including cultural) and environmental spheres. Education plays an extremely important role in the efforts to implement the concept of sustainable development, highlighted during all abovementioned conferences and meetings.

## 3. Sustainable social development

Activities related to caring for the implementation of the goals indicated at the conferences and summits, both at the local and global level, require appropriate social competences since they are largely based on responsible and consistent interpersonal cooperation as well as caring for relationships and trust in people. That is why sustainable social development, assuming equipping people with appropriate social competences, is so important. Without high level of them, implementation of sustainable development postulates will not be possible in other areas. Social development, understood as a social aspect of sustainable development, is a search for an answer to the question about the role of human in the universe. It contains elements of reflection on ethics and morality. It is the development of society as a whole, the involvement of all social groups in shaping the surrounding reality so as to act for sustainable and harmonious development. The care for environmental ethics, quality of life as well as the wellbeing of future generations and other cultures is essential (Mróz, 2018). The social values of sustainable development include, i.a.: solidarity, egalitarianism, responsibility and intergenerational justice. They are associated with caring for the common interests of individuals, social groups and countries on the international arena, particularly during the threat of ecological crisis. Solidarity with other people is a value that manifests itself in the feeling of duty towards another human being, therefore, it is connected with respect for other people. Social egalitarianism requires equal opportunities for everyone to participate in development, primarily by meeting basic needs of the world's poorest people and providing everyone with the appropriate conditions to stay healthy. Justice means that everyone who lives in society thinks in a fair way: equal opportunities, satisfying minimum life needs, the opportunity to participate in society. Social responsibility also belongs to important social values. The sense of responsibility (moral obligation to the world and future generations) results from humanmade internal values (Szadzińska, 2016). Sustainable social development gives individuals more control over their lives and enables greater impact on meeting the needs of others by participating in the decision-making process (Mróz, 2018). Sustainable cultural development is associated with sustainable social development, which means engaging in activities for the sustainable development of all cultural groups. In order to make this possible, the cultural heritage and traditions of these groups should be known and treated with respect. Culture is understood here as the way people are: their behaviour in mutual relations, their history and traditions. Knowledge of customs, values and cultural identity of people plays a very significant role in joint setting the direction of action and in making commitments. Cultural identity guarantees the survival of people, a state and economic system. When undertaking development activities, the values of all people who will be affected by change must be taken into account. Sustainable cultural development requires learning, protecting and providing opportunities for

the development of culture and traditions that are directly linked to the history of all civilisations (Jutvik, Liepina, 2008).

To make social and cultural sustainable development possible, it is important to educate or develop the ability to cooperate and solve problems together with others, as well as to develop creativity, critical thinking, openness to other people, diversity and respect for different cultures and nations. It is therefore appropriate that the concept of sustainable development attaches key importance to education – thanks to this it is possible to educate young people so that they possess key competences for responsible and rational functioning in the world: respecting nature and others, including the above-mentioned social competences.

### 4. Education for Sustainable Development in Polish system of education

The guidelines included in the documents concerning the sustainable development model were taken and adapted by the educational systems of many countries, including Poland. They involve tasks related to comprehensive human development (including the development of i.a. social competences) and protection of the natural world (e.g. by means of implementing actions aimed at preventing further devastation of the natural environment).

Education for Sustainable Development (ESD) is understood as a system of activities aimed at educating society regarding functioning in daily life – to make people aware that every human action has an impact on nature and the environment as well as harmonious coexistence with other people in the world. ESD has also important rules that are to create the conditions for effective implementation of this type of education. These include: constant and consistent raising of public awareness; increasing public access to information and its participation in decision-making; facilitating access to justice bodies in matters relating to this development and the use of the environment; consistent environmental education, development of science and technology. In accordance with adopted international agreements, Poland has undertaken to fulfill the tasks arising from the assumptions of ESD. Therefore, as mentioned earlier, it became justified to introduce them to the Polish education system. Kindergartens and schools have the obligation to conduct such education that takes into account aspects of ESD, which results from the law (although it is not always advisable directly) that regulates their work. It should be noted that in Poland, "apart from environmental issues, ESD includes also such social issues as: human rights, cultural diversity, health and economic aspects, e.g. sustainable production and consumption". ESD is not only the transfer of knowledge, but also the formation of critical and creative thinking, dealing with problems and searching for their solutions. ESD is a lifelong process – from early childhood through higher education to adults – and goes beyond formal education. In addition, "Education for Sustainable Development shapes and strengthens the ability to assess reality and make decisions for the sustainable development of individuals, groups, communities, organisations and countries. By influencing the change of mindset, it will enable people to improve the quality of life by creating a safer, healthier and more prosperous world. ESD can promote critical thinking, develop awareness and raise qualifications thanks to which it becomes possible to explore new visions and ideas as well as develop new implementation methods and tools".

That is why, the education process in contemporary kindergarten and school should be structured as to support the harmonious development of young people thus teachers should strive to ensure that the didactic process implemented by them shapes their students' skills and attitudes that are key to their development and sustainable to social and then professional activity (Mróz, 2018). Methods and forms of work that will support development in all areas of the student's personality as well as will shape key competences for sustainable development, are needed in kindergartens and schools. Comprehensive and harmonious development of the individual occurs only in direct contact with the learned reality – in the course of practical action using problem-based methods and techniques developing various operations and thinking structures (Necka, Orzechowski, Szymura, 2006) - and with comprehensive knowledge of things, phenomena and people, simultaneously developing own abilities, interests and skills (Płóciennik, 2011). To support the students' harmonious development and their acquisition and development of key competences, kindergartens and schools should be open to the environment - place in which they operate. Teachers should activate students by using various forms of work outside the school, e.g. participating in interdisciplinary educational projects in which students' tasks will be closely linked to the place where they live and work (Mróz, 2018).

# 5. Shaping social competences related to sustainable development in kindergarten and school

In each educational system teachers operate on the basis of documents specifying the scope of knowledge and skills that a student should possess at a given educational stage. In Poland, the basic documents that contain such information is the core curriculum. In these documents, references to the assumptions of Education for Sustainable Development in all its aspects (natural, economic, social and cultural) can be found. The emphasis on particular aspects is put in different ways, depending on the educational stage, i.e. on children's cognitive abilities.

With regard to the social aspect, the focus is on cooperation in a heterogeneous group and independence followed by critical thinking, forward-thinking, development design, creativity / innovation and dynamic adaptation to change (Mróz, 2018). These competences are closely related to skills involving communication with others, creative problem solving or predicting the effects of behaviour in relationships with others. Indications for developing these skills can be found in individual core curricula for kindergartens and schools. The tasks of teachers in

kindergartens and schools, related to the development of social competences of children and adolescents, include i.a.: shaping and developing the skills of children and adolescents in building correct relations with adults and peers, shaping the sense of belonging to a given community (family, school group, nation), promoting respect for others as well as the principles and norms of social coexistence. An important task is also to develop the skills in: assessing behaviour in the context of compliance with these norms and rules; recognising the values associated with social skills and behaviour; respecting both one's own and others' rights and obligations. Introducing children and young people into the world of human and children's rights has an important place in this respect. Teachers should also prepare their students to function in a diverse world of cultures. A lot of emphasis in the core curriculum is put on showing pupils and students the value of knowledge by arousing their cognitive curiosity and implementing them in self-development, taking into account their individual educational capabilities and needs thus taking care of their comprehensive, integral and social development. Among the most important goals of general education are: introducing students to the world of values (dedication, cooperation, solidarity, altruism, patriotism and respect for tradition), developing such competences as: creativity; innovation; entrepreneurship; critical and logical thinking; reasoning; argumentation; shaping an open attitude towards the world and other people; activity in social life (starting from school and local environment) and responsibility for the community. Teachers should also shape students' ability to solve problems as well as they should develop in them teamwork skills. All these indications, goals and tasks are related to shaping students' key competences for sustainable development.

# 6. Methods and forms of educational process used to shape competences in the area of sustainable social development

The concept of sustainable development is a holistic concept in terms of the harmonious and comprehensive development of the pupil / student. In the late 1960s, one of the most important representatives of Polish pedagogy and didactics, Wincenty Okoń, presented the theory of multilateral education, in which he took into account the need to take care of the comprehensive development of the student in the areas of: cognitive processing, emotionality, sociality and motor skill. It can be said that he drew attention to the same aspects of human development like representatives of international organisations, who were focusing on developing the concept of sustainable development at that time (Okoń, 1967, 1975). He emphasised that human personality is a harmonious and indivisible psychophysical unity. Okoń believed that the teacher should strive for the fullest, holistic and harmonious development of the student through well-structured didactic interactions. He pointed out that they cannot be based only on imitating skills, providing students with ready-made knowledge

and burdening their memory, as it results in the student's passivity. The teacher should therefore also develop students' imagination, their ability to act and think creatively (Okoń, 1967, 1965). The harmonious development of students must be supported by multilateral learning, which is based on assimilation, discovery, experiencing and action. The effect of such a learning process is to be the overall development of the student which will enable them to transform the world actively (Okoń, 1995). Working on his theory, Okoń has also developed a classification of educational methods, allowing teachers to support the student's multilateral development. He distinguished four groups of methods: methods of assimilation of knowledge (giving methods), methods of independent learning (problem-based methods), exposing methods and practical methods. It is worth noting that this is not a closed model because, in response to the challenges of the modern world, new methods appear – in particular activating methods and didactic games which, however, are within the groups proposed by Okoń. The concept of Wincenty Okoń's multilateral education, although it was created in the 1960s, can also be used today to implement the concept of sustainable development in kindergartens and schools. The task of modern education is to respond to the challenges of the modern world, which is determined by the implementation of the assumptions of the concept of sustainable development. In order to shape the competences of the future – which are key to sustainable development - it is necessary to deliberately and consciously use appropriate methods and forms of work. The effect of the educational process largely depends on the proper organisation of the teacher's work, primarily the selection of appropriate teaching methods. In order to achieve the goals of Education for Sustainable Development, it is no longer possible to consider the educational process only as work with word-based methods, such as lectures or talks, and viewing methods (e.g. presentation). Exposing methods, that are useful for developing empathy and shaping the worldview, attitudes and hierarchy of values of young people, are important. The problem-based methods and the activating methods are of particular importance as well (Krzyżewska, 1998), including methods for: educational project, creative problem solving, creative decision-making, collaborative work, creative thinking (Mróz, 2018).

The selection of appropriate forms of organisation of educational process is also important. The most popular criteria for the distribution of such forms include: the number of people (students / pupils) participating in the teaching and learning process (individual, group and team forms are distinguished), place and time of learning (school forms: lesson and extracurricular activity; out-of-school forms: homework, trip, outdoor activities). In order to support the harmonious development of the student, thus their future competences, the teacher should use various forms of education, included in the teaching process – learning key issues in Education for Sustainable Development. Since the complex problems of the present and the future necessitate joint trans- and interdisciplinary activities, teachers should use forms that enable them to: work together and solve not only hypothetical problems, but also those experienced outside the classroom; develop the hobbies and interests of young people (Mróz, 2018). The teacher, while preparing children and young people to function in the social world, should

organise classes so that pupils/students have the opportunity to check and develop their skills in practice.

Creating a young generation aware of its direct impact on the planet and having knowledge, skills and tools to cease the devastation of nature, as well as simultaneous building a responsible and open, tolerant society consisting of members that are able to harmoniously function together, belong to the important tasks of the educational institution at all levels.

In view of the above, the question arises as to what possibilities in developing key competences for sustainable development (especially social ones among children and young people) a teacher in a modern school has, and what methods and forms of work they use. A question about motivations of using methods and forms suitable for sustainable development as well as the question about the limitations of using various methods and forms in school, are important as well.

#### 7. Methods

The purpose of the qualitative research conducted in 2016 in Małopolska was to explore the methods and forms used by contemporary teachers to shape key competences for sustainable development, including social competences. It was interesting to examine which methods and forms teachers in the 3rd and 4th educational stages use, i.e. teachers in junior high and secondary schools, because proper preparation of young adults for an independent, satisfying life and coping in the world is of particular importance at the stages where young people begin to make their first independent decisions (i.a. related to the choice of further education path) and prepare to reach adulthood.

The following questions were raised as research problems: What methods and forms of education are used by teachers to create key competences for sustainable development among students at the 3rd and 4th stage of teaching? What is the motivation of teachers to use methods and forms of education adequate to shape competences for sustainable development, including sustainable social development? What limitations do teachers see in applying methods and forms important for shaping competences for sustainable development?

The research was carried out using the method of individual focused interview. Eight teachers took part in the study: two men and six women; four teachers teaching in secondary school and four employed in junior high school. Out of the all participating in the study teachers, four achieved the highest level of professional advancement – a certified teacher, two were appointed teachers, another two – teachers at the beginning of their professional career: contract teachers.

The teachers were selected on the basis of the results of a questionnaire, consisting of three parts concerning: (1) methods and forms used by teachers to develop key competences for the sustainable development of students; key issues in Education for Sustainable Development; media supporting their work and sources of knowledge about sustainable development; (2) teachers' attitudes towards methods, didactic forms and included media in the didactic process; (3) educational assumptions for sustainable development. The survey ended with questions about demographic and statistical data.

The teachers taking part in the study constituted the so-called extreme cases – they achieved very good or very bad results in the surveys carried out using the questionnaire. The criteria for assessing the results were: points obtained during the solution of the implicit knowledge test; an analysis of the teacher's methods and forms of work (supporting/indifferent to/impeding harmonious development); the use or lack of using of new media by the teacher; attitudes towards methods and forms of work. During the interviews, the teachers were asked about their own teaching experience, as well as about what determined the choice of individual teaching methods for developing key competences for sustainable development in other teachers. During the interviews, the teachers' statements were written – the respondents did not agree to recording the interviews using a voice recorder or video camera. Statements of the teachers taking part in individual focused interviews were coded according to the following key: symbol N and order number in the order of conducting the interview. Statistical and demographic data of the teachers participating in the interviews are presented in Tables 1 and 2. The interviews were conducted in teacher's rooms (without the presence of other teachers) or in the homes of teachers participating in the research. The data collected during the interviews were subjected to qualitative analysis.

**Table 1.**Statistical and demographic data of teachers taking part in the interviews, who have obtained satisfactory results in the survey

	Gender	Subject	Type of school	Town/City	Job	Level of
		taught			seniority	professional
						advancement
N1	Male	History	Secondary school	Small town	23 years	Certified teacher
N2	Female	German	Secondary school	Small town	18 years	Certified teacher
N3	Female	Polish	Junior high school	Village	12 years	Appointed teacher
N4	Female	English	Junior high school	Big town	6 years	Contract teacher

Source: own study.

**Table 2.**Statistical and demographic data of teachers taking part in the interviews, who have obtained unsatisfactory results in the survey

	Gender	Subject	Type of school	Town/City	Job	Level of
		taught			seniority	professional
						advancement
N5	Female	Geography	Secondary school	Small town	21 years	Certified teacher
N6	Male	Mathematics	Secondary school	Small town	32 years	Certified teacher
N7	Female	Physics	Junior high school	Village	11 years	Appointed teacher
N8	Female	English	Junior high school	Big town	4 years	Contract teacher

#### 8. Results

The analysis of data collected through interviews has revealed several categories that can be helpful in showing the possibilities and limitations regarding the use of methods conducive to ESD – problem-based (including activating) and exhibiting methods. It should be noted that the teachers participating in the interviews also indicated the reasons for their use of problem-based and exposing methods, and emphasised the role of their own motivation to choose these methods.

Basically, the teachers see many limitations regarding the use of methods and forms fostering the development of skills important for sustainable (including social) development. A very important category that emerged from the statements of teachers who obtained both low and high results in the questionnaire survey is the lack of time to use methods conducive to shaping competences important for sustainable development, including social competences. Statements made by the teachers focused on the problem of the necessity to prepare students to pass external nationwide tests and exams, including maturity exam after secondary school, and in the consequence – the necessity to transfer knowledge to students rapidly: I would really like to use different methods, then students would certainly be more interested in the topic, maybe I would instill passion in them. But I have less than three years, basically two and a half years, to prepare them for the lower-secondary school exam. I teach English. If students choose to take this subject in an exam and they have been studying it since the beginning of primary school, they must take it at an advanced level. And in junior high school I have students who came from different elementary schools – some of them can't speak English. How do I manage to prepare them for this exam? It's really hard. School reality is gray, you have to hurry with the material. I have only 2 or 3 hours of English in middle school – depending on the class. This is very little because you still have to take into account that sometimes they will be lost... and you have to write a test. That is why I do not have time to use activating working methods, although I would like the students to like my subject better (N8). Similar problem is indicated by the Physics teacher: Physics is a very difficult subject and I have a few hours. I have to give them knowledge. I don't even have time to do experiments. Students must know formulas, etc.

I don't have time for integration games or joint problem solving ... unfortunately, this is the school reality that you need to quickly "go" with the material. Junior high school lasts only three years and somehow I have to let these students go to this secondary school – they have to know something and pass the tests well... (N7). Teachers who obtained high results in the survey also indicated the category of lack of time as a barrier for the use of activating and problem-based methods. However, they emphasised it in relation to other teachers' work. As a historian, I understand that my colleagues use only a few selected methods – they probably do not have time to activate students, teach them by means of problem-based methods, because there are really few such subjects as: history, social studies, physics or chemistry. I understand that my colleagues are afraid that they won't keep to the material, won't do everything, and how will these students pass the final exams? (N1). I have that comfort that I teach Polish, so I have a little more hours than my colleagues teaching e.g. science subjects. In addition, Polish emphasises knowledge, but also upbringing, emotional and aesthetic development, so in my case the use of various methods, including activating ones, is justified. But for other subjects, when you need to take exams right away, mainly verify the students' knowledge, and hours are really short, the use of many different methods, problem-based, activating, can be very difficult (N3).

The teachers' statements show that the serious obstacle regarding the use of activating, problem-based and exposing methods is the lack of time, resulting from the necessity to prepare students for tests. They do not have enough time to develop various students' skills and competences, and in the consequence – functioning in real life. Hence some sort of discrepancy and contradiction between statements included in the core curricula – which contain the assumptions of Education for Sustainable Development and the obligations that the Ministry of National Education imposes on teachers to prepare students for completing the theoretical tests – appear.

Another category that appears in teachers' statements is **the lack of methodological competence**. Teachers complained that, apart from some of the most popular methods, they do not know the modern, activating ones. The teachers pointed out the force of habit and long experience in the profession. We teach as we were taught – and when I went to school, the lessons were typically done with the use of giving methods. But it gave results, somehow we all passed the final exams. Memory mastery of the material was effective and, above all, quick. I didn't learn many didactic methods at university – only the basic ones, such as: lectures or talks, group work, etc. I still use these methods. I think that teachers with many years of experience have similar experiences (N5). It is much easier to convey the content in the ready form. And that's probably why teachers give up problem or activating methods because they can't work with them. A good discussion is also difficult to conduct – it seems to be a "simple matter", but not every teacher is able to control a group of students who excuse themselves, especially if emotions join in (N4). My colleagues simply did not know about many of the methods listed in the questionnaire. They did not hear about them, and they have never used

them. These are often teachers with extensive experience, when they were at university, there was no talk about activating methods. They were taught by giving methods and tested by a teacher from the material they were supposed to master. And now they teach similarly. But, does it work in today's world? That's another matter (N3). The teachers' statements show that teachers do not know how to use the activating or problem-based methods. They have their favourite set of methods which they use mostly and do not see the necessity of seeking the new ones. Such thinking is very alarming because a teacher should be ready to constant selfdeveloping, not only in their personal but also in professional life. The third category illustrating the limitations of using activating or problem-based methods is efficiency and associating methods with fun, not learning. As some teachers stated, activating methods are associated with joy and fun, not with serious preparation for completion the tests, so they do not apply them in the educational process. I don't want my students to have fun during the lesson. I want to have results. These are adult people, they can take care of their own development. I don't have to teach, for example, using methods that develop creative thinking. And it turns out that in my town I have the best results in terms of secondary school leaving exams. So why change something that works? Please remember that "the better is the enemy of the good"! (N5). Furthermore, teachers pointed out that they are accounted for the effectiveness of teaching, whose measurable indicator is the result of the students' final examinations, not their skills, competences nor building satisfying relationships in future life. Some teachers claimed also that there are some subjects where using activating, problem-based methods are impossible. My role is to prepare students for the final exams, they must know the formulas, know when to apply them [...] In my opinion, my methods are also effective. Developing students' creativity is not in mathematics in secondary school – effects count here, because for them we are accounted for as a school [...] and as I've said, my methods are effective (N6).

Taking into account the teachers' statements, many limitations and barriers regarding the use of methods supporting developing skills connected with sustainable development have been found. It seems that these problems result from both the expectations of parents and government and they are related to good preparation of students and visible effects – the results of the tests, as well as from the attitude of teachers themselves who have their own teaching habits and do not want to change them. It is alarming since teachers should be leaders in showing how to prepare themselves to the future world and how to develop the competences connected with sustainable development, and then they should be leaders and helpers for children and adolescents in developing young people's future skills, especially social ones.

However, there were some statements where teachers have indicated that they care for comprehensive development of their students and they use activating and problem-based methods. Therefore, the category **care for students' development** could be distinguished. There were teachers who claimed that using activating methods helps with the students' development and that is why they should use them. *Today, it is not enough to pass on knowledge to students. Their parents are busy, responsibility for development falls on teachers.* 

Our students spend many hours at school. It is important that this is not wasted time cramming, passing and forgetting. In my opinion, it is much more important to stimulate creativity, learn to cooperate, communicate, take care of yourself, design one's own development, as with this they will go into the world, not with knowledge of what is, for example, alliteration. Of course, this is also important, but more important is the development of students, their personal growth. After all, in a dozen or so or several dozen years, they will be responsible for the fate of the world! (N3). In the teachers' statements, the importance of educational process can be found and the important role of a teacher preparing students for future life is treated as some sort of a professional mission. Starting work, I set a goal that I will not be a "boring" teacher who only teaches, but I will try to develop students – their passions and interests. I try to implement this assumption during each lesson, fortunately in English classes I can do it. I learn myself, I am looking for new solutions and I know that in this way I give 100% – I care for the development of my students. I have the feeling that I am let them into a world of better students, equipped not only with English reading skills, but also competences. This is my little favour for the world! (N4). Teachers who declared their willingness to help students develop seemed to be very careful and helpful for children and young people. I have the impression that in the present world students are so lost ... they don't know what they want, who they want to be, where they are going ... that's why, in my opinion, it is important to help them find themselves, in their own development. That's why I often try new things with them, I try to use different methods of work so that they can see what they like, what they feel good with. In addition, I believe that in the current social reality, knowledge itself – for example a knowledge of a language – is no longer enough. They must be creative, be able to cooperate with others. All work is now based on cooperation. That is why I use different methods to develop these competences. [I want] my students to be able to take care of their future, be happy people one day. Taking into account the statements of teachers who indicated their care for students' development, it can be concluded that for those teachers the preparation for tests is not so important as preparation for life. Furthermore, they are active persons themselves, they search for new ways of teaching and seem to have good relationships with the students as well. Therefore, they may have a high level of competences connected with sustainable development, so they can develop them in their students more easily than teachers who are entangled in the educational system of rules and expectations.

The opinions about used forms of education could be distinguished from the interviews as well. There were also some categories. The category that appeared most often in teachers' statements was, as in the case of teaching methods, **the lack of time**. Teachers believe that some forms of education, such as trips and out-of-school activities, require time commitment, which, in turn, steals time to transfer knowledge: *Sure, you would like to bring students here and there, to a museum, theater or cinema, but when? You have to literally rush with the material because there is not enough time (...). I think that teachers simply lack time to organise additional activities, trips or activities in the field. They are attractive, that's right, but if you* 

have tests, final exams, it's definitely a waste of time for a museum, theater or sightseeing (N8). Another category that often appeared in teachers' statements was organisational difficulty. The teachers emphasised that it is difficult to organise extracurricular activities – they involve additional financial effort on the part of parents (trips) and additional work on the part of teachers, very often in their free time, beyond the working hours. Extra classes are not worth the effort. The teacher stays after school, students complain that they must stay. I still have a lot of work at home – checks, tests, sometimes I check students' notebooks ... (...) If I had to sit after classes in class, I wouldn't have enough time and I have a family (...). (N6). In addition, the category of **no need for other forms of education** other than collective teaching, group work and individual work as well as homework, appeared in the interviews with teachers. Some of the interviewed teachers believe that a 45-minute lesson for a given school subject is enough to provide students with knowledge and shape their competences. It explains the teachers' reluctance to use forms of education other than lessons. The important categories also include the lack of motivation and the reluctance of students. The teachers have claimed that nowadays students can go on a trip with their parents or friends and trips or extra classes organised by school are not attractive for them. Contemporary students have many possibilities to develop their interests beyond school and they eagerly use alternative ways of spending time - not connected with the school. The lack of motivation in teachers was noticed in such statements: Older teachers mostly do nothing, they are burned out. And this demotivates the younger ones, and, what's more, - they are afraid that these older ones will look askance at them (N8). It seems to me that if there is no cooperation among teachers – and this often happens – there is no pro-student attitude that we do something for them, it is difficult to leave the classroom. It is easiest to go on a trip together with two or three classes, so the teacher must look for another willing teacher ... and also, I think, the teacher cannot be a "lonely island" and launch an initiative to conduct extracurricular activities and interest classes if others do not conduct them (N7). As we can see, the fear associated with maintaining correct relationships among teachers and the lack of trust and willingness to cooperate appear. It should be noted that the care for building good relationships as well as team work are important skills for sustainable development. Unfortunately, many teachers have problems with developing their own social skills. Perhaps this is the reason why they very rarely use other than regular forms of education. The teachers have also noticed that the best motivator for students to participate in different forms of education (e.g. trips or extra classes) is their own motivation and support of headmasters and parents. They also focused on developing the competences of many students during trips or extra classes and saw the importance of motivating students: They enjoy. They develop competences. And I try to make the trip not only entertaining, but also developing my competences. For example, I give them a task for a trip or field trip, for example to observe, reproduce something, or, for example, what they would change ... (...). Yes, I have the support of the management, other teachers and parents, who are grateful (N3). I challenge them. This is how I develop my competences. They feel that they learn, but not for school –

for themselves. It sounds like a cliché, but it's true. They know that they can develop through the classes with me, that they can get something out of everything. They are motivated by it – and I keep telling them, and they also know that it's not just about the result of the final exams, but about their future. They will go to a university, they will have to manage their time, work in a group, communicate with others, act quickly, anticipate and think creatively. That's what they learn in my lessons and extracurricular activities, also on trips, in the field, and they are motivated (N1).

Summing up the results of this research analysis on the forms of work used by teachers to develop the competences for the future, it is worth noting that teachers choose those forms of work that require the least effort from them. They are often poorly motivated and see many organisational difficulties. Sometimes they see some difficulties related to cooperation with other teachers. However, those teachers who declare using different forms of education seem to be active, creative and well-motivated. They also notice the importance of educational process in the context of preparation of students for future life by developing their competences in many various ways.

### 9. Discussion

The results of qualitative research show that the majority of teachers use traditional ("giving") methods and typical forms of education more willingly. They indicate many barriers and limitations regarding the use of modern, problem-based / activating methods and out-of-school forms, which may be used in developing key competences for sustainable development, including social development. The interviewed teachers notice the need for some changes in the Polish education system – in a form it would be more suitable for present and future generations of students who should have a chance to develop their skills in a comprehensive way. However, on the basis of teachers' statements, apart from the necessity of comprehensive, systemic changes in Polish education (including the necessity of putting more stress on developing skills and less stress on preparation for tests), several proposals for practical application, which can be implemented locally (in individual schools), can be distinguished by individual teachers.

If teachers want to prepare students for satisfying functioning in life, they should necessarily use methods and forms recommended for developing competences for sustainable development consciously. Analysing the teachers' statements, the focus on building good relationships between students and teachers can be noticed, which is expressed in taking care of developing their competences, despite the organisational and system difficulties. First of all, teachers should start to build a good team in their classrooms and they should be the leader and supporter in that process. This is the basis on which they can build their work with students with the use

of more attractive methods of forms, e.g. problem-based and activating methods. They should be open-minded and not afraid of making discussions with students and spending time with them. In order to have good results regarding the use of activating methods and non-traditional forms, teachers should concentrate on the long-term educational goals, which is expressed in preparation of students for life, not for tests. A very important and good practice is also taking care of being an active, creative and well-motivated teacher themselves, independently from limitations. Having a high level of competences necessary for sustainable development and taking care of their own personal and professional development can be very helpful for shaping students competences.

## 10. Summary

Despite the necessity of conducting Education for Sustainable Development in Poland and the recommendations related thereto in the core curricula, teachers in Poland are experiencing great difficulties associated with the development of students' key competences for sustainable development, including social development. In the Polish school, giving methods and traditional school forms of education are most frequently used. It results from different expectations related to preparation of young people for final exams and insufficient preparation of teachers for using adequate methods and forms of working with children. The lack of time, non-familiarisation with modern methods and lack of motivation to use less popular forms of education are the biggest limitations of shaping competences for sustainable development with the use of adequate methods and forms. The chance is a teacher who stays active, takes care of their own development and thinks about the educational process in the perspective of long-term goals. Institutions, such as universities and colleges preparing people to be teachers, should then focus on developing key competences for sustainable development among the university students who are going to be teachers. In order to strengthen the competences of teachers who are already active in the profession, perhaps it is necessary to consider conducting of courses or postgraduate studies focused on shaping of competences for sustainable development among teachers. Therefore, only taking multidirectional action aimed at developing competences essential for sustainable development – thus supporting students at universities and working teachers and through them students and pupils in schools, can bring measurable effects in the form of an increase in currently important competences in Polish society.

### References

- 1. Borys, T. (2009), Organizacje międzynarodowe wobec globalnych problemów. *International Journal of Management and Economics*, 25.
- 2. Decade of Education for Sustainable Development, http://www.desd.org/, 20 May 2016.
- 3. Nęcka, E., Orzechowski, J., Szymura, B. (2006). Psychologia poznawcza. Warsaw.
- 4. http://nauczyciele.mos.gov.pl/index.php?mnu=92, 24 April 2018.
- 5. http://sustainabledevelopment.un.org/content/documents/Agenda21.pdf, 16 May 2016.
- 6. http://unesdoc.unesco.org/images/0014/001416/141629e.pdf, 20 May 2016.
- 7. http://www.access.zgwrp.org.pl/materialy/dokumenty/StrategiaZrownowazonegoRozwoju Polski/strategia1-3.html, 24 April 2018.
- 8. http://www.unesco.pl/edukacja/dekada-edukacji-nt-zrownowazonego-rozwoju/unesco-a-zrownowazony-rozwoj/, 17 May 2016.
- 9. https://www.mos.gov.pl/g2/big/2009\_04/4f3f267429420f4dfcb32b98f1ac8605.pdf, 13 June 2018.
- 10. Hull, Z. (2011). Wprowadzenie do filozofii zrównoważonego rozwoju. In: W. Tyburski (ed.), Zasady kształtowania postaw sprzyjających wprowadzaniu zrównoważonego rozwoju. Toruń.
- 11. Krzyżewska, J. (1998). Aktywizujące metody i techniki w edukacji wczesnoszkolnej. Suwałki.
- 12. Jutvik, G., Liepina, I. (2008). Edukacja ku zmianie: podręcznik edukacji na rzecz zrównoważonego rozwoju. Ryga.
- 13. Łaszczyk, J. (2009). Kształcenie masowe i uczeń zdolny. In: J. Łaszczyk, M. Jabłonowska (eds.), *Zdolności i twórczość jako perspektywa współczesnej edukacji*. Warsaw.
- 14. Luttwak, E. (2000). *Turbokapitalizm. Zwcięzcy i przegrani światowej gospodarki*. Wrocław.
- 15. Mróz, A. (2018). Nauczyciel wobec koncepcji zrównoważonego rozwoju w edukacji. Cracow.
- 16. Okoń, W. (1965). Wielostronne uczenie się a problem aktywności uczniów. *Nowa Szkola,* 7-8.
- 17. Okoń, W. (1975). Nauczanie problemowe we współczesnej szkole Warsaw.
- 18. Okoń, W. (1995). Wprowadzenie do dydaktyki ogólnej. Warsaw.
- 19. Okoń, W.(1967). Podstawy wykształcenia ogólnego. Warsaw.
- 20. Pakulska, T., Poniatowska-Jaksch, M. *Rozwój zrównoważony* "szeroka i wąska" interpretacja, stan wiedzy, https://sslkolegia.sgh.waw.pl/pl/KNoP/struktura/KGE/Documents/rozwoj\_zrownowazony.pdf, 16 May 2016/13 June 2018.

21. Płóciennik, E. (2011). Rozwijanie zdolności dziecka w wieku przedszkolnym. In: J. Bonar, A. Buła (eds.), *Poznać – Zrozumieć – Doświadczyć. Teoretyczne podstawy praktycznego kształcenia nauczycieli wczesnej edukacji.* Cracow.

- 22. Szadzińska, E. (2016). Edukacyjne przygotowanie do etycznego działania na rzecz zrównoważonego rozwoju. *Chowanna*, 1(46).
- 23. Tyburski, W. (ed.) (2011). Zasady kształtowania postaw sprzyjających wprowadzaniu zrównoważonego rozwoju. Toruń.