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Learning Strategies of Students in Early School Education in the Light of Research

Strategie uczenia się uczniów w edukacji wczesnoszkolnej w świetle badań

KEYWORDS

learning skills, learning strategies, students, teacher, competences, early school education.

ABSTRACT

Learning skills have been included in the competences of the 21st century, which proves their importance in the life of an individual. They are essential in the personal and professional development of a person living in the world of dynamic changes taking place in the surrounding reality. Therefore, the development of learning skills, starting from early school education, becomes a priority. The main role in this process is played by the teacher who supports the child in the acquisition of those skills. Nowadays, the teacher is perceived as a tutor accompanying the student on the paths of acquiring knowledge, taking into account the development of effective learning skills. That's why it is important, among others, to show students learning strategies for effective memorization of content, making notes and improving memory. In order to learn about the students' learning strategies and the techniques used by teachers, interviews were conducted with third-grade primary school students and early school education teachers. Attention was focused on several issues: What learning methods do students use?; Do they use the Internet while learning?; What learning strategies do teachers use in the teaching process? The research results will be used to formulate practical conclusions useful for teachers.

SŁOWA KLUCZE

umiejętność uczenia się, strategie uczenia się, uczniowie, nauczyciel, kompetencje, edukacja wczesnoszkolna

ABSTRAKT

Umiejętność uczenia się została zaliczona do kompetencji XXI wieku, co świadczy o jej ważności w życiu jednostki. Jest ona niezbędna w rozwoju osobistym i zawodowym człowieka w świecie dynamicznych zmian zachodzących w otaczającej nas rzeczywistości. Priorytetowe staje się wobec tego rozwijanie umiejętności uczenia się, począwszy od edukacji wczesnoszkolnej. Główną rolę w tej kwestii odgrywa nauczyciel, który wspomaga w tym procesie. Współcześnie rysuje się obraz nauczyciela jako tutora towarzyszącego uczniowi na ścieżkach zdobywania wiedzy, z uwzględnieniem rozwoju umiejętności efektywnego uczenia się. Dlatego istotne jest m.in.: pokazanie uczniom strategii uczenia się w celu efektywnego zapamiętywania treści, tworzenia notatek i usprawniania pamięci. W celu poznania strategii uczenia się uczniów oraz stosowanych technik przez nauczycieli przeprowadzono wywiady z uczniami klasy trzeciej szkoły podstawowej oraz nauczycielami edukacji wczesnoszkolnej. Uwagę skupiono wokół kilku zagadnień: Jakie sposoby uczenia się wykorzystują uczniowie? Czy korzystają z Internetu podczas uczenia się? Jakie strategie uczenia się wykorzystują nauczyciele w procesie dydaktycznym? Przeprowadzone badania posłużą sformułowaniu wniosków praktycznych przydatnych nauczycielom.

Introduction

Today, more than ever, it is important for individuals to be able to adapt quickly to the existing situation. This is implied by socio-cultural processes, economic and technological changes and the fast pace of life. In this context, it is becoming necessary to develop the competences necessary for an individual to adapt and keep up with changes. One of such competences is lifelong learning. The importance of lifelong learning has been highlighted in many reports, such as the report by Edgar Faure (1975), *Learning to Be*, or the later (1996) report by Jacques Delors entitled *Education. The Treasure Within* (Delors, 1998).

Conditions are changing and so are the demands related to the functioning of individuals. As Kasim Karatas and Ibrahim Arpaci point out:

> […] In the past it was important to remember information, but nowadays it has become important to acquire skills related to where information can be obtained and how to learn it. More specifically, people are expected to acquire learning skills. People who cannot learn and cannot organise their own learning processes are falling behind in many areas in the world where technology is developing rapidly (Karatasi Arpaci, 2021, p. 3).

It is certainly necessary to take into account changes and needs in the education sector. To this end, the educational process should be adapted and enriched with new methods. Also, teachers should be supported and educated in this respect. As Ewa Filipiak writes, "not only educational reports, but also undertaken debates among educators show that the new concept of education should be aimed not so much at preparing individuals for a new society, but at providing the individual with intellectual signposts to understand the surrounding world and to be a responsible participant in it" (Filipiak, 2008, p.18).

It is crucial to move from teaching pupils to know something to teaching them to actively participate in studying, to seek knowledge and to select information. We live in a world where news comes from everywhere and it is important to receive and select it rationally and critically, especially with regard to so-called fake news. The handling of information material, as well as the appropriate organisation and implementation of the learning process should be treated as a developmental task in middle childhood (Nowakowska-Buryła, 2008). It is at this level that one should begin to acquire the learning strategies that will be the basis for learning at subsequent levels of education and for finding one's way in the existing reality. Józefa Bałachowicz points out that:

> […] In the early years of education, the child learns the difficult art of choosing values which determine the direction of "getting on well" with the world and with oneself. In the early years of education, this will therefore include: the formation of the child's cognitive dispositions and creative abilities, the motivation to learn and the ability to learn independently, and to communicate and interact with others, in particular the development of self-confidence; learning to overcome difficulties, teaching the "ability to contribute", personal participation in learning and directing one's own activity (Bałachowicz, 2017, p. 72).

Therefore, it is essential to develop the ability to learn skills, including the subjective treatment of the learner as an active, autonomous participant in the learning process.

Learning as a competence and learning strategies

It is worth noting that "in recent decades, competences have become essential elements at all stages of formal and informal education" (Gutiérrez Porláni Serrano Sánchez,2016, p. 51). According to the Organisation for Economic Co-operation and Development (OECD), competences are more than just knowledge or skills. They include the ability to cope with complex demands by drawing on and mobilising psychosocial resources (including skills and attitudes) in a specific context. Competence

in itself is neither observable nor measurable. Instead, it is popular and very often used, especially with reference to politicians, doctors, lawyers, police officers, as well as teachers and students. In particular, the importance of competence is given to the expectations related to activities and tasks to be performed by certain people. The category of competence is thus a subjective category, always belonging to someone – a specific person or group of persons (OECD, 2005, p. 4).

One of the competences which are considered to be "key competences" is "learning to learn" (cf. Recommendation of the European Parliament and of the Council of 18 December 2006 concerning key competences for lifelong learning). Educational institutions, principals and teachers must, therefore, pay more attention to the development of this skill as "trends in broad and balanced curricula also aim to prepare students for life after education, with general education aiming to prepare students to meet economic and social needs" (Vitello et al., 2021, p. 8). Ultimately, the individual must realise the need for this skill as it helps one to adapt to the existing, as well as new and rapidly changing conditions.

According to Czesław Kupisiewicz, learning is the process of "intentional acquisition by a learning subject of specific knowledge, skills and habits, taking place in the course of direct and indirect cognition of the reality" (Kupisiewicz, 2000, p. 25).

Determinants of learning include motivation (extrinsic, intrinsic), the level of emotions or the presence of others. Pupils must want to take action to learn new things; to expand their knowledge. At each level of education, the above-mentioned factors are important, also in grades 1–3. It is good to remember that, at this level, it is worthwhile to arouse pupils' curiosity and motivation in order to sustain them in the following years of learning and in cognitive activities outside school. It is because learning takes place in a variety of spaces, including the digital one. The basis, as the researchers point out, is, e. g. interest in learning, success, low anxiety, one's own pace and way of working, as well as independence in thinking and acting, and responsibility for one's own initiatives (see Burke, 1995; Filipiak, 2008; Harmin, 2022).

Jerome S. Bruner elaborated on one of the well-known learning strategies: through discovery. "The more the child is able to regard learning as discovering something rather than learning about something, the stronger will be his/her tendency to learn on the basis of autonomous self-reward, and even better on the basis of the reward of discovery itself" (Bruner, 1978, p. 670). The aim of the strategy is to arouse the learner's motivation and desire for action, i. e. the emphasis is put on learning rather than teaching. Four important moments of the strategy can be distinguished: the creation of a problem situation, the identification and definition of problems and ideas of solving them, the verification of suggested solution ideas, the analysis of data, the structuring and application of the obtained results to new tasks and new situations (Filipiak, 2011, p. 86).

It should be emphasized that in modern education it is important to pay attention to subject-based learning. It fosters motivation, the willingness to act and a positive attitude towards acquiring knowledge. A motivated learner "is able to evaluate his or her performance positively, to assess his or her effectiveness, and, at the same time, he/she can receive positive feedback on effective involvement in learning" (Bałachowicz, 2017, p. 86). In this context the idea of self-regulated learner by Ewa Filipiak is important as it focuses on the learner's subjectivity. A self-regulated learner has the sense of agency, efficiency, responsibility and meta-cognitive knowledge, i. e. knowledge about himself/herself as a learning unit, knowledge of the task and of learning strategies (Filipiak, 2012, pp. 75–76). In this place, it is also worth mentioning Janina Uszyńska-Jarmoc's concept of meta-learning. The programme "I understand myself and school, I can learn" was based on the assumption that a pupil at this age already has a certain base of knowledge and experiences, which he/she supplements and expands under the influence of new situations. The programme indicates the direction of the learning process, which consists of four stages:

a) personal colloquial knowledge: becoming aware of personal, colloquial knowledge on a given topic;
b) exchange of colloquial knowledge: exchange of information between peers;
c) scientific exchange;
d) reconstructed personal knowledge which is integrated, and further uncertain and dynamic (Uszyńska-Jarmoc, 2014, p. 130).

Therefore, teachers have an important task, especially in early childhood education, to develop the students' ability to learn. In this context, it is important to give the pupil the opportunity to actively participate in the learning process, giving him/her help when he/she needs it, as well as providing emotional support. Above all, the learner should know the purpose, he/she should be able to use a variety of learning strategies, and to combine new information with existing knowledge. Therefore, as Filipiak points out, teachers should answer the questions: "How does the child perceive the world?, How does he/she construct knowledge?, How did he/she come to know?; and, above all: What does it mean to »have knowledge«?" (Filipiak, 2008, p. 27).

In this context, the teacher assumes the role of a guide/tutor on the path of cognition, and an organiser of the learning environment. According to Ewa Kulawska, "teachers can help students develop their ability to learn by consciously guiding this process and indicating cognitive strategies depending on the type of knowledge and the external (time of day, place of learning) and internal (motivation, physical state) conditions in which intellectual processes take place" (Kulawska, 2018, p. 71). Therefore, the teacher's role in active learning is to engage the student; to awaken his or her curiosity, courage and ability to cope with difficulties. Bałachowicz speaks of a teacher

who is a self-creator: "He can make education a wonderful adventure of life; he will support the child in developing engagement, the courage to explore, creativity, innovation and reflexivity" (Bałachowicz, 2017, p. 11). Also, his task is to support the child through motivating him/her and showing strategies and ways that may be useful in effective learning.

The literature of the subject distinguishes between metacognitive and cognitive strategies. The former are used to plan and supervise actions at the symbolic level, i. e. in the mind (Ledzińska, 2000, p. 126). The classification of metacognitive strategies includes:

- planning strategies, e. g. browsing through the materials, formulating questions;
- monitoring strategies, e. g. focusing attention;
- regulation strategies, e. g. reading again, revising (Dembo, 1997).

In turn, according to Ewa Czerniawska and Maria Ledzi*ń*ska, cognitive learning strategies (memory strategies) are "procedures of organizing situations and memory material used by a subject in order to remember and/or recall information" (Czerniawska and Ledzi*ń*ska, 1986, p. 241). Thus, starting from the early school stage, an individual should get to know various types of strategies. The group of cognitive strategies includes as follows:

1. repetition strategies, e. g. repeating, rewriting materials;
2. elaboration strategies, e. g. mnemonics, making analogies;
3. organising strategies, e. g., grouping, concept maps (Dembo, 1997).

It is important not only to learn about learning techniques, but – above all – to be able to choose the right ones for oneself and apply them during the learning process. In order to do this, it is necessary to try different strategies to see which one facilitates the effective absorption of content. The use of known ways will be helpful in the future, in a situation of adaptation to the existing conditions and constant expansion of knowledge, i. e. lifelong learning. Therefore, as Adamina Korwin-Szymanowska points out, "the learning process should take into account not only cognitive elements and metacognitive strategies, but also motivational beliefs and regulatory strategies that make up an integral system of self-regulation" (Korwin-Szymanowska, 2017, p 176).

It becomes fundamental to teach pupils learning strategies already at the early education level. The suggested methods should be adapted to the developmental stage of the pupils, their abilities and their learning styles. The implementation of strategies is carried out by the teacher integrating them into the didactic process. It is important to remember that the technique is not just used in one or two lessons, but it is referred to over a longer period of time. It is also crucial to practise using a given strategy in practice. Beata Oelszlaeger-Kosturek emphasizes: "we can use the trial-and-error method of learning, but we can also apply tested learning strategies – for example,

using didactic games or actively designing learning activities with the students' participation" (Oelszlaeger-Kosturek, 2013, p. 8). Tested ways of learning will allow students to remember more information at a faster pace, which can also affect students' motivation and make learning fun for them.

The state of research on children's learning strategies in early childhood

Learning strategies have become a subject of research in psychology and pedagogy, and they are used interchangeably with the term "memory strategies". With reference to the subject of this article, research findings that focused on early childhood were chosen for presentation. Attention was also given to the research focusing on teachers' attitudes at this educational stage towards the use of strategies in the learning process.

In the light of the research findings, two research areas related to learning strategies can be discerned.

The first field of research includes the types of learning strategies known and used by early childhood students. It is worth citing the findings of Kristen Karably and Karen M. Zabrucky. They found that the older the children are, the more aware they become of the benefits of using memory strategies in the process of deliberate memorisation (Karably and Zabrucky, 2009). Moreover, it is important that the teacher presents the strategies correctly, which allows them to choose the best technique for themselves later on. It is important to adapt the strategy to, among other things, the age of the learner, their skills or the material to be remembered (Czerniawska, 1999).

During the early school years, pupils are introduced to different types of learning. According to Helen Bee, the strategies that are used by schoolchildren include: the most frequent repetition of information, organising material (grouping/sorting by category), elaboration, i. e. referring to the existing knowledge while learning new information (Bee, 2004). It also happens, according to the research, that most students do not use any strategies in their learning process. Studies observing the use of strategies such as sorting, pairing and repeating the names of objects aloud have shown lower memorisation scores in students who did not use any of these techniques (Schneider et al., 2004).

An important issue is the use of mnemonics as cognitive strategies in the learning process. Małgorzata Mnich and her students conducted research in this area after a series of classes in a particular area of education, during which the students were introduced to a particular memorisation technique that they could also use in practice. For example, "the students who, for three weeks, had been learning and using a pictorial numeral system to learn dates and numbers, were asked to evaluate the new way of

remembering; most of them rated this way of remembering as very useful (16 out of 18 persons surveyed), 2 persons – as useful" (Mnich, 2016, p. 164). Attention was also drawn to the possibility of using this method when learning dates or the multiplication table. "The effectiveness of memorizing dates with the new method (pictorial system of numbers) was rated very high by 13 learners, high by 2 learners and moderate by other people; while the usefulness of this method in learning the multiplication table was rated very high by 9 learners and high by 6 people" (Monk, 2016, p. 164). As we can see, students emphasized the positive aspect of using this mnemonic in the acquisition of content from different areas".

Second, in the context of teaching memory strategies, research on teachers' opinions regarding this issue was highlighted. This is another area of research inquiry. This is because the approach of teachers is important in terms of showing ways of learning and gaining knowledge about new techniques that support memorizing the content. In this respect, by means of an interview questionnaire, Ewa Kochanowska obtained the declarations of teachers from grades 1–3 teaching in the Silesian, Lesser Poland and Subcarpathian voivodeships. "As the main form of developing cognitive independence, the respondents indicated the use of problem-based teaching (100%) and activating methods (96.8%), such as, for example: didactic games, brainstorming, concept maps, etc." (Kochanowska, 2017, p. 185). Based on her research, she drew the following conclusion:

> […] it is alarming that only few statements by female respondents referred to the use of metacognitive strategies as tools for developing children's cognitive independence. In this case, the respondents declared shaping the ability to plan activities independently (17.2%) and equipping students with the knowledge of how to learn (7.8%) (Kochanowska, 2017, p. 187).

Taking into account the research results cited, we decided to focus on the learning strategies that are used by students and known to early childhood education teachers.

Preliminary research on learning strategies in early childhood education

The subject of the research undertaken includes the learning strategies of students at the early childhood stage in the light of the empirical identification of learning styles and supporting techniques used by teachers. These are preliminary analyses to identify the subject and area of the research. Due to interesting results of such pilot study, I decided to quote them in this article. I will continue similar analyses in a more developed manner.

The cognitive aim of this research is to gain knowledge about learning strategies of third-grade primary school students. The practical aim is to use the research results obtained as a premise for the formulation of pedagogical conclusions.

Research problem and methodology

The main research problem is expressed in the question of what learning strategies are most commonly used by third-grade primary school students and suggested to students by teachers.

The leading definition of learning strategy that was adopted includes the statement according to which the strategy includes ways of processing information aimed at the improvement of understanding and storing information used by individuals to understand, learn or preserve new information (O'Malley and Chamot, 1990).

The following specific research problems were formulated:

- How most third-grade students learn?
- What mnemonics do they use to remember content?
- How do they use notes?
- What is the extent of Internet use in the learning process of the students surveyed?
- What is the teachers' opinion of the level of learning skills of their students?
- What learning support techniques do early childhood education teachers know and demonstrate to students?

The research took the form of a survey. Teachers and third-grade students of the Irena Sendler Primary School No. 19 in Kielce were interviewed. Interviews were chosen because conversation allows for exploration of the topic, clarification of unclear expressions, and observation of emotions. Twenty individual interviews were conducted with students, and six individual interviews were conducted with early childhood education teachers. In the school year 2022/2023, there were 2 first-grade classes, 2 second-grade classes and 2 third-grade classes in the primary school which was the study area. Pupils from third grades took part in the research.

Research results

First, we need to explain students' understanding of the term: "learning". They associate learning with preparing for a test, preparing for the next class, or with memorizing something.

Most often students stated that they liked learning; some of them also said that "learning is OK; both 'yeas and 'no'". There were also students who admitted that learning is not their favourite activity (3 students). The main motive for learning for them is to have a better future, to get a good job, to expand their knowledge. "You

have to learn for the future"; "For the future, to have a good job"; "To know more, to be clever".

Regarding learning methods, the interviews show that almost all students indicated that they learn by heart through repeated reading, repetition and rewriting. This means that repetition and a regulatory metacognitive strategy are the dominant cognitive strategies among the students interviewed. "I go home – I repeat. At home – I repeat. That's my system". "I read what I have to learn, e. g. for a test. Then, if I don't remember, I read again". "I read to myself, and then write it down". "I don't study science because I'm good at science. It is similar with other things, actually, except for maths. I study maths, and then my parents ask me to repeat what I memorized".

Students often talked about their parents' involvement in the learning process. Parents often check if children remember the contents. "I study with my parents. They give me a task and I give them the result. If I don't know the answer, I repeat and they ask me again". "We repeat and do tests with my mum". "We play such a memory game with my mum. If I answer correctly, I get a candy". One third-grade student stated: "I don't study at home; I know everything from the lessons".

With a few exceptions (2 students), the lack of mnemonics in the learning process can be noted. Therefore, students do not use elaboration as a cognitive strategy. "I mainly repeat, for example, when I learn how to spell 'król' [king], I keep repeating to myself that with an '*ó*'. That helps me; other ways rather not".

An example of referring to something or someone by association was a student's statement about linking a word from English to a well-known character. Other examples were more about imagining certain scenes, such as the little house and garden from the book *Asiunia* or the numbers in the tasks performed. "I just imagine the numbers, sort of see them and then do the task".

Learning is also the ability to take notes to better remember content, recall and consolidate information. This is supported by, among other things, memory maps, which are an example of strategies for organizing learning. Third-grade students mainly take linear notes. As a result, they hardly ever use drawings or symbols. Only four students said they sometimes draw and write. "I like to draw, but when I learn, I write", said one of them. "When we have to write, I write normally in a notebook". "I write in a notebook because I can't draw". "Sometimes I write, sometimes I draw something, but I rather do this next to the text".

None of the students mentioned the mind map despite the fact that, as we know from the teacher, this way of taking notes is known to them and used by the teacher.

It seems interesting that most of the students do not use the Internet in the learning process. The main reason they cited was their limited access to the Internet. "No. No, because I have limited time on my phone", said one student. Three schoolgirls said they look for information online: "if you need to find something and it's mentioned

in the instructions"; "sometimes, if I'm not sure"; "I look up English words". One student admitted that he does not use the Internet when he studies, but sometimes his parents use it to look for the solution to his homework assignment.

Interviews with early childhood education teachers also yielded interesting insights. First, teachers emphasized the importance of students' learning skills in their lives. Second, when asked to determine the level of this skill in students in grades 1–3, they indicated a rather low level. They pointed to a reduced level of attention and independence in organizing the learning process. One teacher described the level of the aforementioned skill as satisfactory: "students willingly use teachers' prompts to remember the required content faster: reading aloud, highlighting, writing vocabulary on cards, creating mental maps, using the association technique".

The surveyed teachers listed the techniques they are familiar with, which they consider helpful for their students. They emphasized that they use them in their lessons. These are the following techniques:

- games to improve concentration,
- association games (memorizing phrases and expressions by association: drawing symbols, creating acronyms, etc.),
- using various codes (with the use of pictures, colours, etc.),
- linking text with movement and rhythm,
- learning to create notes, mind maps,
- associations, cards for self-study and testing of one's own knowledge,
- writing and repeating information,
- reading aloud.

It is worth mentioning that among those techniques there are those that have been known for many years (reading aloud or writing down content and repeating it), as well as those that are mentioned by contemporary teachers and specialists in neurodidactics (e. g. mind maps, associations). The surveyed teachers use various types of cognitive strategies for learning and support metacognitive strategies, such as monitoring through exercises aimed at improving attention focus.

Summary and conclusions

Based on the results of the survey, it can be concluded that most of the students enjoy learning and see it as an opportunity for the future. All of the children who were interviewed learn by heart through repetition, reading and parental verification of knowledge. In addition, they often create linear notes. The Internet, on the other hand, is not an aid to their learning process. This is due to the fact that the students' parents limit their time for using digital media.

The teachers surveyed emphasized the importance of learning skills in modern schools. In their statements, they emphasized the importance of teacher support in the students' learning process. They listed the ways, techniques and strategies which they use in their teaching and upbringing work, with these being mainly cognitive learning strategies.

Thus, the answer to the main research problem (What learning strategies are most often used by third grade elementary school students and suggested to students by teachers?) was found. Among students, the dominant cognitive strategy is repetition and regulatory metacognitive strategy. Teachers suggest various types of cognitive learning strategies and metacognitive strategies to students, such as monitoring through attention exercises. The research undertaken was a pilot study, and reliable conclusions will be possible when the number of respondents increases.

In light of the research, it can be concluded that it is necessary to develop learning skills at the early school stage and suggest different types of learning strategies to children. It is also important to support students in the process of learning, rather than just impart knowledge to them. This requires the teacher to be aware of the need to develop learning skills and to have a thoughtful working strategy. It is therefore necessary to make students familiar with learning strategies (e. g. mnemonics, mind maps) and use them during the lessons. As Mnich emphasizes:

> […] In order to make education accessible, interesting and enjoyable, the school should abandon excessive didacticism and encyclopedism in favour of creative methods of effective learning that implement students to direct their own development. Thanks to such methods, they will perceive learning not as an unpleasant duty, but as a situation that allows them to discover new horizons (Mnich, 2016, p. 167).

It is necessary to maintain students' curiosity and arouse it through the educational activities stimulated by teachers, as well as through students' own activity. Interest in the material is of great importance in the learning process, as it can arouse curiosity and uncertainty at the same time, and it can motivate children for exploration.

In the context of the results of our own research, it is also important to show students how to use the Internet more widely in the learning process. In this respect, media education about how to rationally and selectively use the Internet and look for useful, reliable information there can be helpful. As Tomasz Huk writes, media education should meet the expectations of learners who are media users, information managers and responsible creators of ideas who use multimedia tools from the area of global media culture" (Huk, 2011, p. 45).

In early childhood education it is necessary to arouse students' curiosity concerning the world and acquisition of new skills. This is possible through their active participation in the educational process, with the emphasis on their own actions and

cooperation within a group. Subjectivity in the learning process contributes to independence in thinking and actions taken. It allows the student to make decisions at various stages of the educational process. As B. Oelszlaeger-Kosturek points out, "to plan educational tasks together with children is to gain their active participation in activities and to help them accumulate an adequate stock of knowledge and skills. In educational practice, we can use many different forms of such planning" (Oelszlaeger-Kosturek, 2013, p. 47). This is made possible, for example, by the use of activation methods. An example is the project method which engages students by formulating questions, searching for answers, undertaking independent or group activities. This is to be carried out under the guidance of the teacher who supports and accompanies the child on the path of exploration, but who does not impose his own ways of thinking or solutions. According to the research by J. Uszyńska-Jarmoc:

> […] significant influence for stimulating the development of the child's competence and sense of competence, as well as the development of self-creative dispositions, is exerted by the methods of supporting the child's creative (and self-creative) activity, especially the method of designing educational opportunities and the method of projects, which are not very popular and hardly ever used in traditional work with younger schoolchildren (Uszyńska-Jarmoc, 2007, p. 411).

In conclusion, at the early school stage it is essential to pay attention to and develop students' learning skills. This is possible by taking into account the subjectivity of the student in this process and combining cognitive and metacognitive strategies. It is worth paying special attention to the cognitive strategies of elaboration (mnemonics, making analogies) and organization (grouping, concept maps), which will be helpful in organizing the learning process.

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