

CRAFTS CREATIVITY AND ITS DEVELOPMENT FROM THE PRIMARY SCHOOL TEACHERS' PERSPECTIVE

*PAVLÍNA ČÁSTKOVÁ

*Palacky University Olomouc, Žižkovo nám. 5, Czech republic
email: "pavlina.castkova@upol.cz"*

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Abstract: Education in Czech Republic has recently undergone considerable changes. Emphasis is placed on the development of individuality, personality qualities, and competencies of pupils and students. Creativity has become an essential quality of modern man and it is proclaimed across many areas of human activity, being defined in various ways depending on the application of creative aspects. The area which we deal with in more detail in the article is creativity in technical education. In the context of current events in the field of educational policy in the Czech Republic, we present partial results of a research probe of a qualitative nature focused on identifying key elements of educational strategies of primary school teachers in the implementation of creative technical activities at primary school.

Keywords: education, crafts, creativity, primary school, teachers, teacher education.

1 Crafts and technical creativity in the context of contemporary challenges

At present, creativity is considered one of the essential abilities of the 21st-century person. Hence the emphasis is attributed to it in key documents and educational strategies. Schools and teachers are facing the challenging task of preparing pupils for situations not encountered before, for jobs not yet existing, for solving problems not yet perceived as problems, for working with technologies not yet invented (Samandari, 2011). Difficult as the task may seem, its accomplishment is sustained by new ideas and approaches which are entering education, thus transforming it gradually. In addition to key competencies, emphasis is placed primarily on creativity, which is inflected across educational areas and expected outcomes. (NÚV, 2017)

In general, the development of technical skill, creativity, and thinking is, to a certain extent and in various forms, an integral part of the initial education of most countries in the world. However, the specific form in terms of content, scope and methodology of the latter always reflects the geographical conditions, individual and social needs, current opportunities, and, last but not least, promising challenges. Therefore, significant differences might occur in particular research papers. These are reflected in the level of procedures, tools, materials used, as well as in the sense of implementing such focused teaching. In some cases, differentiation appears in the degree of the proportion of skillfulness and technical thinking development between individual schools within one country. For example, in the Czech Republic, while certain schools place more emphasis on the development of manual skills, others tend to focus on cognitive development, that is to say, the formation of technical thinking of pupils.

2 Research investigation

Based on the above theoretical background and current needs of educational practice, a research survey was conducted, the aim of which was to identify key elements of educational strategies of primary school teachers in the implementation of creative craft/technical activities at primary school. Since we strived to capture a more holistic view and identify the interrelationships, we focused directly on primary school teachers and their internal view of the topic. Our main goal was to understand how teachers themselves approach the implementation of technically creative activities. The partial goal was to identify key situations which appear in their implementation of teaching creative technical subjects and to define partial problems in various stages of the teaching process. Last but not least, there was an effort to characterize teaching strategies applied by teachers in the implementation of this type of activity.

A self-reflective questionnaire was applied as a research tool, which was compiled from open-ended questions so as to enable completely free answers from the respondents. The individual items in the questionnaire represented the expected primary categorization of the data obtained. The questionnaire was then processed using a qualitative analysis of the text, so-called "analytic induction" (Savigny-Baden, 2013, p. 422) based on "grounded theory" (Strauss, Corbin, 2014). This methodological approach was chosen in an effort to map the research area not based on existing theory, but in order to create a new theory.

The research problem of the presented empirical research is the choice of teaching strategies of primary school teachers in the implementation of technically creative activities. With respect to current changes in the field of educational policy, the research is focused on primary school teachers as drivers of change and the main factor influencing the successful implementation of curricular innovations. Particular educational procedures and the overall approach to teaching are shaped not only by professional competencies but above all by personal qualities, experiences and opinions.

3 Research goals, questions and characteristics of respondents

The main goal of the research is to carry out research aimed at identifying teaching strategies of primary school teachers in subjects of a creatively technical nature.

- (Q1) How does a teacher prepare for the implementation of creative technical subjects?
(Q2) How is teaching creative technical subjects implemented?
(Q3) How is the final reflective-evaluation phase of teaching creative technical subjects conducted?

Teachers were selected by means of a survey carried out all over the Czech Republic, and the contact with the teachers was conducted both in the form of personal meetings and online. A total of 55 primary school teachers were involved in the research. Respondents worked at various types of schools in terms of organization and location (fully organized urban schools, fully organized village schools, schools with more grades in one class were represented).

The group of respondents consisted exclusively of women¹ with different lengths of practice, and of different age categories. The most represented group consisted of teachers aged 35-50 with 4-15 years of experience and teachers with pedagogical experience of 16 and more years. The least represented group was teachers with experience of up to 4 years.

4 Data analysis strategy

In conformity with the research goals, content analysis was chosen, which allows performing a systematic and comprehensive summary of the obtained data and is based primarily on the study of recurring specific phenomena. The following sequence was followed during the processing of the obtained data:

- segmentation and coding;
- creating categories;
- identification of relationships between categories;
- creating structures and stories;
- interpretation of investigated data.

In the first phase, open coding was used to thematically reveal the analysed text, followed by primary categorization based on Vivo codes. Parallely with open coding, annotations were applied (Miles, Huberman, 1994), which allowed to move from the level of empirical data to the conceptual level, and thus further develop the codes into subcategories, including the representation of their relationships, and head towards a

comprehensive understanding of phenomena, processes and interactions. The qualitative analysis thus conceived enabled not only the identification of key phenomena but, more importantly, the qualitative interpretation, including the introduction into a broader context, of the latter. Furthermore, selective coding was used to identify key categories. (Juklová In Skutil, 2011, Hlad'o, 2013)

5 Research survey results

The analysis of data obtained through self-reflective questionnaires is structured into four primary categories, three of which represent individual phases of the teaching process (Preparation and planning of teaching, Course of teaching implementation, Conclusion and evaluation of teaching). The last category covers "other" phenomena, that is to say specific statements of the respondents, which refer to the personal experiences, preferences and knowledge of the latter, often permeating the content of all previous categories. Based on selective coding, an internal subdivision was created within the key categories. The subcategories of Teacher's preparation, Pupils' motivation, Pupils' preparation for the teaching, Anticipated teaching methods and Others were also included in the category Preparation and planning. Within the Course of teaching implementation category, a total of six subcategories were singled out, namely Preparatory phase of the lesson, Teaching methods and organizational forms, Pupils' personality development, Pupils' reactions and Others. The last category, Conclusion and evaluation of teaching, covers following internal subcategories: Product-oriented assessment, Process-oriented assessment, Assessment Pupils' personal qualities oriented assessment and General matters (see Table 1).

Table n. 1: Categorization of content analysis data

Teacher's preparation and planning	Pupils' motivation Pupils' preparation Anticipated teaching methods Others
Course of teaching implementation	Preparatory phase of the lesson Teaching methods and organizational forms Pupils' personality development Pupils' reactions Others
Conclusion and evaluation of teaching	Product oriented assessment Process oriented assessment Pupils' personal qualities oriented assessment General matters

As emerged from the analysis, the perception by teachers of the subject Work activities was rather narrow. Teachers solely mentioned learning situations focused on making a product, while other activities, which can be included in the teaching of Practical Activities, such as trials and experiments, activities aimed at acquiring theoretical knowledge (work with resources, worksheets, and so on), activities aimed at solving technical problems (group or individual solutions of specific situations, that is to say, activities not resulting in product creation), were not represented.

Within *Teacher's Preparation and Planning* category, the efforts of teachers to create ideal conditions for pupils' work were significant. According to the answers obtained, thorough preparation of the teacher is of capital importance, including the pre-making of a product, often in several variants, to give pupils a comprehensive idea of the final product, that is to say, a thing which pupils produce or an idea which they discover. Furthermore, the preparatory activities of teachers comprise considerations about other possible modifications of the final product with respect to the possibilities and limits of pupils in the group. Usually, pupils are offered both the basic variant of a product and its simpler and more complex modifications. A simpler variant of the product is often intended especially for pupils with special educational needs. For gifted students,

teachers prepare ideas for independent work should the former complete particular tasks earlier than most other pupils in their class.

The comprehensive provision of all necessary aids, tools, implements and materials by the teacher is almost standard. The preparation being entirely under the direction of the teacher is justified mainly by the young age of the pupils. Respondents state that insufficient preparation by the teacher often leads to the disorientation of the pupils confronted with the learning situation, their inability to flexibly adapt to the conditions and/or solve the problem independently. Consequently, the planned educational goals are not achieved, which is most obvious with pupils requiring a specific approach whose reaction is particularly intense.

An often mentioned part of teacher preparation is the visualization of the individual steps of the solution process, which serves as a basis for pupils' activities following the initial instruction of the teacher.

Motivation is an integral part of teaching is a natural part of the teacher's preparatory considerations and activities. According to the respondents, the nature of practical activities is in itself a great motivator for pupils, and especially in the lower grades, the creation is a natural motivational activity of pupils. Nevertheless, motivation is a crucial factor influencing teacher's preparation. A strong motivating factor when choosing the activity is the theme of the product as well as the tools and materials used, which can make the planned activity more attractive (cf. Částková, Dostál, Kropáč, Janu, 2019). Respondents stated the importance of taking into consideration the gender specifics of pupils with regard to their interests and preferences, which is why teachers allow pupils to choose from more than one topic. The strongest motivating factor is the usefulness of the planned product, especially its applicability in the lives of pupils or their loved ones. Recurring events in a person's, school's or pupil's life become a natural motivation. In accordance with the interdisciplinary concept of primary education, the phenomenological approach is applied across subjects. Pupils' activities are thus thematically focused mainly on activities and events during the year. Moreover, depending on the locality of the respondents' school, regional differences are also partially manifested in the choice of topics, products and the nature of the activities.

Another specific subcategory resulting from the Vivo codes is *Preparation of pupils before teaching*, demonstrating the teachers' effort to at least partially involve students in the preparation for teaching. Following exact instructions given by the teacher, pupils participate in the preparation of the workplace, aids and materials before the start of teaching itself. One of the possible variants of pupils' involvement mentioned by respondents is a symbolic visualization of key steps in the work process. This group activity leads to the activation of pupils and, through the symbolic marking into the pupil's speech, makes it possible for pupils to understand partial technological principles. The aforementioned steps subsequently increase the pupils' independence, active participation of the pupils in the educational process, and the gradual acquisition of co-responsibility for learning outcomes by the pupils. All the above mentioned are supported by the efforts of teachers to integrate modern teaching aids and the use of ICT as a tool for the individualization of pupils' activities.

With the increasing age of students, gradual development of independence in thinking, problem-solving and action is evident. Accidentally created as well as subsequently intentionally created problematic situations of a technical nature, the solution of which becomes pupils' task, become a useful tool.

According to the respondents, the general perception of the subject as relaxing and complementary, both by pupils and teachers, is problematic. In teaching practice, the subject is often replaced by "more necessary" lessons representing the so-called mainstream of education. Furthermore, it is possible to note the tendency to simplify activities so as to eliminate the characteristic elements of technically oriented objects. These

include, for example, the complexity of teacher's preparation, the need to comply with basic hygiene and safety principles, requirements for material and technical equipment, and so on.

Another primary category, the *Course of teaching*, is singled out from the area of *Preparatory phase of the lesson*. The preparatory phase shall be given sufficient room, especially during pupils' independent work. As far as the motivation of pupils is concerned, collective analysis of the work process, explanation of individual steps, and discussion of necessary aids and materials are considered as crucial. In the discussion phase, students are guided to develop technical thinking, creativity and imagination by proposing possible workflow options. Certain respondents emphasize providing pupils with space for the application of their ideas and the development of their creativity. Creativity and self-invention of the pupils are enhanced by the offer of various topics, the choice of several product variants or a less specific description of the final product. However, on that point, there are discrepancies between particular statements, as partly free creation is limited by the requirement of the teachers for disciplined activities of a frontal nature, which should lead to a uniform product and eliminate the occurrence of possible errors in the work process.

Within the *Teaching methods and organizational forms* subcategory, respondents preferred group work with an emphasis on mutual learning, development of cooperation and other social skills of students. When working individually, pupils use a shared work environment, which enables them to create independently and yet together. As it was unanimously claimed by the respondents, the implementation of group work is conditioned by the formation of groups influenced by the teacher in such a way to pupils of different levels be naturally incorporated and thus heterogeneous groups be created. As regards creative technical activities, respondents prefer smaller groups of pupils (max. 4 pupils). Pupils' group work is described as more attractive for the latter, but at the same time very demanding. A different approach is applied by the teachers questioned with respect to the preferred teaching time allowance, as some respondents prefer 45-minute lessons, while others often use the possibility of connecting lessons and allow students to work in blocks.

As far as the area of *Pupil's development* is concerned, the respondents showed considerable criticism of the abilities of an affective nature as well as of the level of practical skills. Teachers try to take into consideration the different learning styles of pupils, which are reflected both like activities and in working with materials and aids. Respondents state a double typology of pupils, where some pupils appreciate working according to the exact model and without much influence of their invention, while other pupils prefer freehand creation. The analysed data show that working according to the assignment is very problematic. Furthermore, the inability of pupils to focus on the task is stated as the most significant obstacle to activities of a creative technical nature and at the same time as a cause of numerous accidents by the respondents.

An integral part of each lesson is the final phase, usually incorporating a summary of the lesson and feedback from pupils. However, this phase is often partially or completely absent in technical subjects' lessons, which is often mentioned as a shortcoming by the respondents. The reasons for this absence are numerous, among others, they are an inappropriate choice and layout of creative activities with respect to the level of pupils' skills and/or necessary cleaning of the premises. Providing feedback to pupils is often realized at a long time interval or only marginally in class. Another frequently mentioned topic was classification. Some respondents tended to deviate from the usual classification, mainly due to insufficient coverage of the latter of broader aspects of activities implemented. According to some teachers, technically creative activities should have a relaxing and motivating character and develop personality traits of pupils, the evaluation of which by classical school classification is not considered as adequate. Therefore, teachers often resort to motivational classification. According to the

analysed data, teachers often focus on the final product in their classification as a necessary summative assessment, while broader aspects such as the course of the pupil's work, work commitment, production process, creativity and others are only evaluated verbally. As one of the solutions, frequently used by the respondents, the latter stated pupil's self-assessment, covering specific internal creative processes of the pupil and the specifics of assessment of creative technical activities. Depending on the pupils' age, self-assessment is implemented using symbols, points and/or simpler assessment statements, for example in a community circle, the main purpose of these being the development of the pupil's affective components. Negative feedback from a teacher to a younger school-age pupil is perceived in the statements as inadequate and uneducational. Typically technical categories such as the appearance and functionality of a product do not play such an important role in teacher's evaluation but are rather referred to as marginal criteria. On the contrary, the key evaluation criteria are the pupil's effort and participation in activities as the basic goal of feedback from the teacher is to motivate pupils and encourage further creative activity.

Table n. 2: Summary of data obtained by research within individual categories

Categorization	Partial categorization	Data summary
Preparation and planning of teaching	Teacher's preparation	Efforts to create ideal conditions for pupils' independent work. Offer of product modifications according to the degree of difficulty - link to students' self-assessment. Preparation of a simple workflow for pupils.
	Pupils' motivation	Clear need of taking into account gender specifics in the planning and preparation of activities. Usefulness and applicability of products as the main factor of motivation. Obvious effort to make activities more attractive - aids, resources, and so on. Natural motivation resulting from current events in the lives of pupils.
	Pupils' preparation before teaching	Involvement of pupils in preparation before the actual start of teaching. Symbolic visualization of partial steps - development of technical thinking.
	Anticipated teaching methods	The gradual development of pupils' independence in logical and technical thinking through solving problem tasks (randomly created and prepared in advance).
	Others	Perception of the subject as relaxing by both pupils and teachers. Clear tendency to simplify activities to make them less demanding for teacher preparation.
Course of teaching	The preparatory phase of the lesson	Sufficient time devoted to demonstration and explanation of the workflow leads to more efficient work and course of teaching. Involvement of students in the visualization (plan) of individual steps of the production process. Error as negative vs. error as a "lesson".
	Teaching methods and organizational forms	Space for the development of pupils' creativity. Mutual inspiration is also within the individual activities of pupils.

		Appropriate choice of group composition by the teacher (number, characteristics). Simple and fast products vs. larger-scale activities.
	Pupil's personality development	Communication and cooperation is a key part of teaching.
	Pupils' reactions	Group work is more demanding for pupils, however, more attractive. Problematic concentration at work. Problematic overcoming of obstacles and solving partial problems. Pupils' limits with respect to creative expressions.
	Others	Insufficient development of pupils' independence.
Conclusion and evaluation of teaching	Product-oriented assessment	Summative assessment of the product as a necessary formal part of teaching.
	Process-oriented assessment	Positive experiences of the pupil as the main goal of teaching.
	Pupils' personal qualities oriented assessment	Neither the skill nor the skill level of the pupils is assessed. Pupil's interest, activity.
	General matters	Failure to take into account the specifics of technical education in assessment. Pupils' self-assessment as an adequate way of assessment. Elimination of negative feedback.
Others		Motor skills are more important than creativity.

6 Discussion and summary

In an effort to develop a more comprehensive view of the implementation of practical activities at primary school and the identification of individual approaches of teachers, a research tool enabling the provision of sufficient space for free expression of views, outline of specific conditions at school and teacher-student relationship was selected. As respondents spoke openly about their more or less successful strategies and partial decisions, a systematic analysis of the issue was possible.

Despite the fact that the questions were focused more generally on the subject, the statements of the respondents showed a rather narrow perception of the content, as only statements about pupils' activities leading to product creation appeared. Other activities related to the content were completely neglected, such as the development of a theoretical basis, experimental and experimental activities leading to the knowledge of the properties of materials, and/or the solution of problematic situations of a technical nature. There can be several reasons for this phenomenon. Firstly, due to the specifics of primary school pupils, the predominant effort of teachers is to develop primarily the skill side of the pupil, which generally has a declining tendency in society. Secondly, understanding the subject as relaxing and compensatory in relation to cognitively oriented activities might be perceived as one of the causes. This perception, although in accordance with the theoretical definition of the functions of the subject, can also have a negative effect, though. The content offered to pupils should not neglect the knowledge base which underpins creative activities, as knowledge and teaching about technology are a key part of educational goals in the field of technology education at primary school (see eg Kropáč and Chráska, 2004; Kožuchová, 2008; Friedmann, 1993; Honzík, 2015; Částková, 2018). The question still stands whether teachers do not classify technical knowledge intentionally or whether they pass the assessment on

to pupils during the creative work of the latter, always in relation to the product they are working on.

In the following section, we shall try to summarize the answers to the research questions, according to which we shall further structure the text.

(Q1) How does a teacher prepare for the implementation of creative technical subjects?

Teachers' preparation to develop pupils' technical thinking and skills is challenging in many ways. Leaving aside the economic demands on materials and aids, the spatial background is also a big topic. Workshops and classrooms designed for technical work are usually adapted for older school-age children and primary school children, therefore, cannot work safely with the particular work desks, tools, instruments and aids. Consequently, practical activities are reduced to the most elementary subject matters by the teachers, covering only a limited range of possible activities.

The preparation of technical material and aids, which are used at lower primary schools, is predominantly the teacher's responsibility in the cases investigated, which we do not consider optimal. According to the respondents, the pupils participate to a very limited extent, which mainly stems from the set system of cooperation and communication between the parent and the teacher. Insufficient participation of the pupil in the preparation of lessons was also one of the frequently appearing topics. Pupils' actions were described as non-independent. As a result, pupils do not share responsibility for the results of their learning and it is very difficult for them to solve naturally occurring issues.

(Q2) What is the implementation of teaching creative technology subjects like?

The approach of teachers to the choice of teaching methods and work procedures can also be described as contradictory. In the research sample, it is possible to identify two partial approaches, namely receptive and creative. In the research, we identified the tendency of teachers to be monotonous with respect to the requirements for the final product of the pupil. Any deviation from the "teacher's idea" and strict adherence to the work procedure was perceived negatively. Such a directive way of assigning tasks to pupils significantly eliminates the space for the development of the pupil's personality features, the so-called soft skills. However, in contrast to the described receptive procedure, an effort to develop the pupil by providing freedom of creation group was identified with a group of teachers. Such teaching aims to provide opportunities to use one's own invention, either in the process of work or in its final solution. As free creation is especially demanding for pupils who have no experience with it, demands for a change of the approach to teaching are placed on teachers. The actual activity shall be preceded by a discussion of the topic and the setting up of a creative and inspiring safe atmosphere. As not all pupils prefer this way of learning, it is necessary to approach pupils individually and to choose from various more or less defined activities and topics. Capturing creativity in technology is also problematic. Different subjects presuppose the development of different types of creative thinking. The differences between creativity in art (ART) and creativity in technology (STEM) are significant. (Broekhoven et al, 2020) Technical creativity is a specific type of creativity realized in a large area called "technology". This can be both at the level of technical practice and at the level of technical theory. The connection between these two levels depends mainly on the level of knowledge and skills of the pupil, that is to say on the level and type of school education.

As follows from the data analysis, creative activities at primary school in the first years of schooling are focused on the acquisition of basic skills and the development of motor skills, rather than on the development of pupils' creativity. Only pupils in higher grades are provided space for the development of

technical creativity. (Duffy, 2006) However, the findings of developmental psychology point to the need to acquire certain thought mechanisms leading to creative activity. (Hennessey, Amabile, 2010) By the time teachers focus their activities on developing students' creativity, these mechanisms are already partially in place, including limits and barriers. In addition, the pupil in this developmental period is already significantly influenced by the tendency to conventional behaviour and actions detrimental to creative activity. (Dacey, Lennon, Fiore, 2000) Moreover, no connection between creativity and the level of psychomotor skills of pupils has been proven. (Honzíková, Sojková, 2014) For the above reasons, it is necessary to include the activities for the development of pupils' creativity as soon as in the pre-creative stage of the child (preschool age) and further systematically develop them in teaching at lower and higher primary school. A key question is whether teachers view the issue of creativity in accordance with the theoretical basis and, if so, how they reflect the need to develop student's creativity in the preparation and implementation of teaching.

(Q3) How is the final reflective-evaluative phase of creative technology subjects teaching implemented?

In many aspects, the assessment in technology education is a more complex issue than assessment in cognitively oriented subjects. (Liebchen, 2003; Hanschke, 1992) Due to the fact that the description of a pupil's creative technology activities is mainly related to the terms activity, action, behaviour and conduct, the five-level classification scale as a dominant method of evaluation in the Czech Republic proved to be insufficient. The classification often reflects only the final "impression" representing the summative evaluation of the teacher. The teacher's approach mirrors the overall philosophy of the school, including evaluation. A different way of assessing pupils for subjects with the predominance of cognitive load and for subjects with a predominance of educational activity might be set out in school curriculums. Overall, the nature of the feedback provided by the teacher should be shaped primarily by the effort to create a positive relationship to practical activities. A partial goal should then be the formation of the pupil by their involvement in the assessment through the induction of self-assessment activities by the teacher. (Cowie, 2005) The subject of teacher evaluation can be the pupil's product, the course of the pupil's activity and broader aspects including an individual approach to the activity. In the statements of the respondents, evaluations focused on the result of the pupil's activity appeared most often, followed by evaluations focused on the course of the pupil's activity and quality. Although the evaluation criteria were set through a demonstration of the expected product, these criteria no longer appear when describing the final evaluation phase of the lesson. The question is whether and how the criteria are perceived by the pupil in case they are not specified by the teacher before the start of the activity.

As the analysis of the obtained data showed, the evaluation is carried out by teachers rather unsystematically, intuitively, without setting formal criteria which would allow monitoring the individual progress of pupils, which is naturally perceived by teachers, however, often not sufficiently communicated to pupils. The so-called "technical criteria", namely the workflow planning process (imaginativeness of the design, sketch, design of production process and its record or sketch, choice of materials and so on.), production process (knowledge of terminology, adherence to work procedure, work technique, level of motor skills (shifts and changes), movement and work skills, quality of operation, occurrence of errors in handling activities, choice of tools, material management and energy, work organization, compliance with the principles of occupational safety and health, workplace organization, ability to work independently and creatively) and the product assessment process (product functionality, work accuracy, absence of failures to meet the time required to perform the specified work, originality, and so on) are not systematically applied by teachers during the evaluation of pupils (Hohlhoch, 2001; Honzíková, Sojková, 2016).

7 Conclusion

Since the beginning of the 21st century, the development of creativity has come to the forefront in education. Taking into account the dynamically changing conditions in society as they have manifested themselves in the last two years, this component becomes even more important. It is also reflected in the preparation of legislative and curricular changes through a major revision of the framework educational programs, the new version of which should come into force in 2023. In connection to this, we are currently intensively involved in preparing a completely new concept of education called Man and Technology. The article presents the intended topics and the expected learning outcomes on the pupil's side, formulated on the basis of research into the needs of pedagogical practice.

The qualitative nature of the research survey made it possible to analyse the real course of teaching practical activities from the teacher's point of view and identify important learning situations, key points of their preparation and possible solutions to naturally occurring problems in the form of examples of best practice. Teachers' views, attitudes, opinions and applied educational strategies were influenced by many variables. As the research sample consisted of teachers of different age categories, with different lengths of practice and different school backgrounds, a view of the issue from several levels was revealed. A partial goal of the research survey was an effort to characterize the educational strategies of teachers applied in the implementation of this type of activity. The framework of educational strategies consists of individual phases of teaching, the characteristics of which will form the basis for further research activities of the authors.

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