
ONE METHOD FOR RESEARCH TEACHING OF STUDENT EDUCATION

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Abstract: The article has practical value for the introduction and development of research teaching in an academic environment. The interdisciplinary nature of research training requires the use of multidisciplinary methods, which, in the process of solving the problem, open up opportunities for multiplicity of answers, productive strategies and results. Students also master the learning materials, reflecting on different theoretical, practical and personal perspectives. The morphology of multidisciplinary is available in many methods from different scientific fields. They can be combined, combined, applied to extract the most useful information about a scientific problem. Hence the specific characteristics of the multidisciplinary methodology: combinability, efficiency and adaptability, when applying multiple methods. The article introduces one of the methods that is introduced in the process of teaching students teaching. It is argued that in a more diverse environment, student educators identify a pedagogical problem, the better they master the pedagogical interpretation and multisensoryness of the problem. They cover its synergistic and holistic character with respect to each individual element in it. In the course of research teaching, the teacher goes through professional and methodological self-reflections. They are related to the level and response of the student group. One of the methods that develop self-reflection and research reflection for teachers and students is the method of pedagogical interpretation of didactic visualization. This is a research multimethod, through which cold people develop creative pedagogical thinking, discover a pedagogical problem and present solutions to it. They master the scientific terminology of the discipline and, in pedagogical interpretation, activate their scientific-theoretical vocabulary. The article presents its substantive nature and theoretical and practical applicability. The article examines a controlled method for qualitative research. It combines observation, conversation, debate, interpretation, visual techniques. The main component in it is the subject - the subject. An attempt is made to give a conceptual and theoretical basic statement of one of the methods used in research teaching - pedagogical interpretation of didactic visualization. Through this method, students actively learn, learn through experience, learn by entering roles, learn by mutual assistance. They examine the pedagogical problem of different prisms. This is how multi-sensory learning is applied. The multiparadigmatic method is presented conceptually and theoretically. Empirical criteria and indicators have been constructed against it. They can successfully carry out qualitative research.

Keywords: higher education, multi method, research training.

1. INTRODUCTION

In today's educational space, interdisciplinary interaction between the disciplines and interdisciplinary interactions in science emerges. Therefore, a broader interdisciplinary basis, here referred to as research methodology, is being adopted today in research. This interdisciplinarity presupposes the application of methodological pluralism as the main methodological approach in constructing a methodology for qualitative pedagogical research. This provides an opportunity for a more complete and reasoned interpretation of scientific pedagogical facts and results. The boundaries within which pedagogical analyzes are conducted are being expanded. This projection is didactically useful in the application of research teaching in an academic setting. On the one hand, it "detects" various details in its unexplored projection, on the other hand, it is possible to determine the application limits for each individual method. Research into the effectiveness of research teaching involves a self-reflective look at teaching methods and combining them into complexes. The development of a research methodology of multidisciplinary methods makes it possible to open up a number of possibilities for multiplicity of answers, productive strategies and results.

In this article, multidisciplinary is considered as the presence of many methods from different scientific fields, which can be combined, combined, applied to extract the most useful information on a given scientific problem. Hence the specific characteristics of the multidisciplinary methodology: combinability, effectiveness and adaptability in the application of multiple methods. In this sense, it may be thought that the use of research tools from other disciplines leads to the enrichment and expansion of multimethodology in research teaching.

The use of research multimethodology embraces, interprets, and summarizes diverse philosophical positions. They are in the role of a bridge: from the perspectives of constructive, positive, dialectical, pragmatic, social to transformative perspectives (Greené, 2006). Multidisciplinary methods are an opportunity to transform different philosophical positions into new knowledge through scientific challenge and significant discovery. The pragmatic perspective can be interpreted by transforming the principle of "everything that works" to "everything that is important for research" (Morgan, 2007). The transformative perspective implies an orientation towards

multidisciplinary methods of penetrating the whole process of research - from the problem through the process to the conclusions, as well as the important orientation for the use of results (Mertens, D. M., 2010). In this sense, multimethodology provides an opportunity to integrate different theoretical perspectives, serving all stages of scientific research.

Multimethodology raises specific questions. The multiple criteria raise the question of validity of application and legitimacy of results (Christensen, 2014). It is recognized that the validity of multimethodology refers to the extent to which research methods are successfully combined to solve a research problem. Successful validation is related to the types of conclusions and meta-conclusions reached through combined studies (Christensen, 2014).

One of the research multimethods designed for teaching in an academic setting is the "pedagogical interpretation of didactic visualization".

2. PEDAGOGICAL INTERPRETATION OF DIDACTIC VISUALIZATION

The method of "pedagogical interpretation of didactic visualization" by its very nature bears the most reflective expression of research teaching and is therefore used as an empirical multimethod. The research-reflexive expression here develops in two parallel directions: professional-pedagogical expression of the teacher; educational and pedagogical expression of the student. Structurally, this multimethod consists of two hierarchically linked constructs: didactic visualization; pedagogical interpretation.

In the article didactic visualization is understood as a subjective projection of future/observational skills that the teacher wants to develop in students. Visualization is achieved through an image (photo) of a certain situation, a short training video, a movie, a constructive assignment, a movie tracking with pedagogical messages. Didactics, the "didactic" as a theoretical and pragmatic element of learning, is encoded in the thematic core of the learning component. The didactic visualization is never "in principle", always related to a specific topic or learning cycle, with certain expected results. Didactic visualization covers a wide range of pedagogical motives through which pedagogical knowledge can be achieved, strategies or projections can be developed.

In its conceptual focus, didactic visualization has general characteristics with a case such as multimethod. The specific difference is that different types of perceptions are initially activated here. The influence of colors, music, speech, expressed emotion, design of the environment additionally influence the perception, understanding, explanation, interpretation and solution of the pedagogical problem. In the present study, these additional factors are considered to enrich the possibilities for pedagogical interpretation. Didactic visualization requires students to identify a pedagogical problem, ie. to apply theoretical didactic knowledge in a structured contextual environment. Pedagogical discovery actually enhances students' research creativity. The didactic visualization is at the heart of the dialogical discovery, the interpretation of the discovered pedagogical problem.

As a term, interpretation (Latin „Interpretatio“) means an explanation of the meaning, the meaning of something. In Bulgarian interpretative and synonymous vocabulary Interpretation is defined by: understanding, interpretation, explanation, clarification, explanation, expression, execution. Expressed in the context of pedagogical interpretation, this understanding directs: taxonomically reflective absorption of pedagogical knowledge and hence transformation of information into pedagogical. Pedagogical interpretation is not possible without acquired pedagogical knowledge. Applied to didactic visualization, it structures a reflective research method. Through it, interpreting certain objects or phenomena identifies different pedagogical aspects of the information received. Assumptions about the causes of the phenomenon, about possible motivations are developed, pedagogical solutions are offered, etc.

In order to refine the research understanding of pedagogical interpretation, P. Reeker's thought is used (related to the text, it also sets the parameters of pedagogical interpretation): "To understand a text is to illuminate our own situation or to place in the predicates of our situation all the signs that make the world around us. It is that expansion of the surrounding world into a world that enables us to talk about the relationships that are revealed by the text - rather, the relationships that are just revealing the world. Thus, discourse frees us from the visibility and limitation of situations, revealing to us an entire world - new dimensions of our being-in-the-world" (Rieker 1993).

In other words: the pedagogical in interpretation reveals the pedagogical attitude of the researcher; "Immerses" the researcher in a pedagogically observable situation that he understands, interprets and can manage and synchronize according to his own pedagogical skills. At the same time, the "pedagogical in interpretation" is discovering new dimensions in the pedagogical being (paraphrase), through which research skills and attitudes are developed.

The pedagogical interpretation of didactic visualization is always complex. It has many pedagogical meanings. This is due to the fact that educational reality is always multivariate and offers many opportunities for development. At the same time, this multimethod is based on the possibility of information-value-semantic exchange between different sciences, theories, concepts, paradigms, as well as between participants in pedagogical interaction. Therefore, pedagogical interpretation requires the inclusion of different types of knowledge and skills that come from the bosom of pedagogical, didactic, psychological. The visual pedagogical reality as the object of

understanding is not passive in relation to the researcher subject (teacher, student), they are mutually influential and therefore it is possible to speak about the subject-subject environment in which the pedagogical interpretation develops. In other words, the pedagogical interpretation of didactic visualization is also a dynamic subject-subject method. As a method of dialogical understanding, it offers great opportunities for pedagogical interaction.

Empirical content criteria are developed when applying this research method. They assess students' cognitive activity, their active involvement in discursive dialogue, expression of a pedagogically grounded position, ability to exhibit "pedagogical discovery" with respect to a coded / hidden visualization problem.

The empirical criteria are of a qualitative nature and are a generalized expression of the specifics of this method. In this case, they are aimed at students' manifestations and achievements.

Table 1: Empirical criteria

Empirical criteria for pedagogical interpretation of didactic visualization		Indicators by criteria
1.	Depth in the analysis of pedagogical interpretation (<i>meaningful criteria</i>)	1. Explains didactic visualization in a pedagogical context.
		2. He commented, through "pedagogical discovery", on various aspects of the information received.
		3. Reveals motives, attitudes and interests encoded in didactic visualization.
2.	Adequate application of theoretical ideas in pedagogical interpretation (<i>analytic-synthetic criteria</i>)	1. Transforms the received information from pragmatic to scientific-theoretical. Transfer to scientific and theoretical substantiation.
		2. It applies different pedagogical approaches to the interpretation of scientific theses and concepts.
		3. Identifying pedagogical methods, tools that correlate the problem.
3.	Logic and completeness (<i>language-style criteria</i>)	1. Uses correct Bulgarian statement.
		2. Uses pedagogical terminology in interpretation
		3. Interprets the thoughts and opinions of eminent scientists.

3. CONCLUSION

In the article didactic visualization is understood as a subjective projection of future / observational skills that the teacher wants to develop in students. Visualization is achieved through an image (photo) of a certain situation, a short training video, a movie, a constructive assignment, a movie tracking with pedagogical messages. In its conceptual focus, didactic visualization has general characteristics with a case such as multimethod. The specific difference is that different types of perceptions are initially activated here. The influence of colors, music, speech, expressed emotion, design of the environment additionally influence the perception, understanding, explanation, interpretation and solution of the pedagogical problem. In the present study, these additional factors are considered to enrich the possibilities for pedagogical interpretation. Didactic visualization requires students to identify a pedagogical problem, ie. to apply theoretical didactic knowledge in a structured contextual environment. Pedagogical discovery actually develops students' research creativity.

The didactic visualization is at the heart of the dialogical discovery, the interpretation of the discovered pedagogical problem. As a method of research teaching, he develops and refines the process of active learning, productive and non-violent learning, creative skills and "pedagogical self-awareness" (Shivacheva_Pineda, I., 2019). He pedagogical interpretation of didactic visualization is a method of research teaching that stimulates the self "transformation, modification, conversion, expands cognitive... activity (Georgieva, 2017). He pedagogical interpretation of didactic visualization is a method of research teaching that stimulates the self "transformation, modification, conversion, expands cognitive... activity (Georgieva, 2017)

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