

# Formation of Gnostic Skills in Future Social Teachers in The Process of Media Education

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**ABSTRACT:** Gnostic skills are a little-studied topic both for Kazakhstan and for the world scientific community as a whole. Therefore, it is necessary to study this problem in as much detail as possible in order to modernize the teaching process and successfully develop gnostic skills in future social teachers in the process of media education. The purpose of the study is the theoretical and experimental substantiation of a complex of pedagogical conditions for the formation of students' gnostic abilities in the process of professional education. The methodological basis of the presented research is a combination of various general scientific methods of cognition. In this study, methods of analysis and synthesis of information, a comparative method, as well as methods of induction and deduction were used. At the final stage of the study, the method of systematic analysis of scientific literature was used, which relates to the subject of the study. In the process of research, it was determined that gnostic abilities mean a proven readiness to achieve a goal in gnostic activity, realizing it under more or less strict control through thinking with awareness of the entire system of one's main actions or part of this system. It was determined that the effectiveness of mastering gnostic abilities also depends on the deep assimilation of theoretical knowledge and practical activities based on them, on direct acquaintance with the methods of action and their understanding. The presented study is of practical importance for theorists and practitioners in the field of higher education. The materials that were obtained in the course of the study are valuable information. By applying the information presented in practice, it is possible to improve higher education systems in the context of the pedagogical specialty. The developed recommendations can be applied to develop the gnostic abilities of students-teachers of a social orientation.

**Keywords:** media education, gnostic skills, future social teachers, teacher training.

## I. INTRODUCTION

Over the years of independent formation, Kazakhstan has achieved impressive success in reforming the economy and the public sphere. The regulatory and legislative basis for the functioning of a market economy was formed in the state, which includes the creation of market institutions, the labor market, and the order of property rights and the social system were established at the state level. The active national economic formation in Kazakhstan, as well as the increase in its importance in the international community, necessitated significant reforms in the field of higher education, as well as some changes in its role in society.

The rapid economic and social transformation in Kazakhstan necessitates significant reforms in higher education to meet the evolving needs of society and the international community. This research emphasizes the critical importance of developing gnostic abilities in future teachers to ensure they can effectively analyze and address pedagogical challenges, thereby aligning educational practices with the demands of a post-industrial world. Developing gnostic abilities in students of pedagogical colleges and universities is essential for enhancing their capacity to analyze and address pedagogical challenges effectively, thereby improving their overall teaching proficiency and adaptability to the demands of modern education.

Despite the extensive research on the critical role of gnostic abilities in education, there is a significant gap in the practical development and integration of these skills within pedagogical training programs. Current studies lack detailed methodologies for building and implementing structural-functional models of gnostic abilities in the

educational process. This research aims to address this gap by developing a comprehensive framework for the formation of gnostic abilities, including specific programs, models, and methodological support tailored for students in pedagogical colleges and universities.

Modern higher education is called upon to manage the educational process, taking into account the needs of society, which are objectively determined by the content of social practice. A significant number of experts study the tasks of the current education system in accordance with the assessment of joint directions in the state and the world, as well as with the conditions of the emerging post-industrial world civilization. There is an opinion that changes in the social status of the education system can no longer be achieved within the framework of the classical system of pedagogy. In order for a student to become a subject of labor and knowledge, a creator and organizer of social life, he must develop ways of a projective view of the future in the educational process [1].

The works of domestic and foreign researchers seem to confirm the imperativeness of education for human formation in the context of massive anthropogenic problems. The understanding of the world by each person is purely individual. Education helps a person to form a certain system of values, to work out the mutterings of the existing reality. Introducing students of pedagogical colleges and universities to pedagogical activity, it is necessary to form gnostic abilities in future teachers [2]. According to some researchers, gnostic skills underlie all others and include the ability to analyze the pedagogical situation, formulate strategic, tactical and operational tasks in education, develop strategy solutions, evaluate projects and ways of productive and unproductive solutions. Their implementation and reformulation of pedagogical tasks, to search for the best ways to solve them. Gnostic abilities are necessary at all stages of solving a pedagogical problem, they are closely related to the depth of analysis of the pedagogical situation, so the problem of developing these abilities of students should be given special attention [3].

The effectiveness of solving the problem depends on the fulfillment of several conditions. These conditions include: identifying the specifics of vocational education for students of pedagogical schools, determining the place and role of gnostic abilities in the structure and content of teacher training, building a model of gnostic abilities and a structural-functional model of their formation in the educational process, development of a suitable program for the implementation of gnostic abilities, building a model of skills and abilities, including goals, intentions, principles, content and technologies, establishing criteria for the formation of gnostic abilities in students, as well as developing methodological support for this process in teaching students [4].

The specificity of student training is determined by the trends in the development of the education system as a whole (fundamentality, continuity, humanization), the goals and objectives of training specialists, the age and individual characteristics of students, the content and technology of work with students. Gnostic skills are a systemic part of the professional readiness of students of pedagogical disciplines: they are organically included in some other groups of skills, and also determine the final effectiveness of vocational training [5]. The aim of the research is to theoretically and experimentally substantiate the complex pedagogical conditions necessary for forming students' gnostic abilities in vocational education, which involves fostering critical thinking, analysis, and synthesis skills. The study is practically important for both theorists and practitioners in higher education, offering valuable insights and data on effective pedagogical strategies. By applying these findings, higher education systems in pedagogy can be significantly improved, particularly in enhancing the cognitive and intellectual readiness of students. The developed recommendations are specifically useful for cultivating gnostic abilities in student-teachers with a social orientation, enabling them to better understand and address educational challenges.

## II. MATERIALS AND METHODS

The methodological basis of the presented research combines various general scientific methods of cognition. This study employs methods of analysis and synthesis of information, a comparative method, and the methods of induction and deduction. According to **Dotger**, analysis involves breaking down complex topics into smaller parts to facilitate a deeper understanding, while synthesis integrates these parts to form a comprehensive view. The comparative method, supported by **Ivanova**, involves evaluating similarities and differences between elements to draw meaningful insights. Induction, as defined by Ivanova, involves deriving general principles from specific observations, whereas deduction, grounded in Dotger, involves applying general principles to specific cases. At the final stage of the study, the method of systematic analysis of scientific literature. This method involves a structured review of existing research to draw conclusions related to the subject of the study. These theoretical frameworks support the definitions and conclusions derived from our methodological approach [1].

The input of the study used the method of information synthesis. Synthesis is the process of joining or combining previously disparate things or concepts into a whole or set. Synthesis is also a way of connecting the whole of the functional parts, in contrast to the analytical method, the synthetic method is the division of the whole into functional parts. The study also used the method of information analysis. Analysis is a methodical process that

involves breaking down a complex topic or object into smaller, more manageable parts. This approach allows for a deeper and broader understanding of the topic or object by examining each component in detail.

Comparison can be characterized as a logical device that is necessary in any cognitive activity: at different stages and at different levels, regardless of the subject. The comparison method can be characterized as a narrower term. Comparison can be used as a special research method only if the comparison procedure requires, for its effective implementation, special training and a special organization. Such a need usually arises when comparing complex objects and phenomena that are characterized by a large set of very different characteristics. The experience of comparative law shows that on the basis of the comparative method it is possible to solve not only scientific and educational, but also important applied problems. In particular, studies of the "reception" of law, or, in other words, the transfer of legal experience and the original legal system to another, are successfully developing. Conducting such studies serves as an important stimulus for the development of theoretical, methodological and problems of comparative research in legal disciplines.

The study also used induction-deduction methods. The inductive method is a method of research and presentation in which there is a transition from observed concrete facts to the extraction of principles, general provisions of the theory and the definition of patterns. Deduction is a way of thinking, the result of which is a logical conclusion, the truth of which is guaranteed by the truth of the assumption. In addition, it is possible to determine the logical and methodological device, which is in the range from the general to the particular in the process of thinking.

The analysis of scientific literature is the most accessible and at the same time one of the most demanding research methods, since it requires a high response and performer and the ability to critically evaluate reading in relation to the chosen research topic. Also, this method requires certain skills in working with literature: the ability to take notes, make notes and group the collected material in accordance with the work plan. The main goal in the process of analyzing literary sources is to collect scientific data on a specific topic, determine the progress of the studied field of knowledge, consider existing views on the problem, contour perspectives for research and formulate a working hypothesis. The analysis took into account the scientific research of scientists from the EU and countries of Eastern Europe. In the course of the study, the theoretical aspects of the problem of the formation of gnostic skills in students of higher educational institutions in the process of professional and pedagogical training were considered.

### III.RESULTS AND DISCUSSION

The social order of pedagogical universities involves the training of teachers who are able to effectively organize pedagogical activity and evaluate its results. Pedagogical activity is one of the most difficult areas of human labor. It is a complex dynamic system containing a number of elements corresponding to certain work functions. Various scientists, characterizing the structure of pedagogical activity, distinguish its various components. Thus, scientists distinguish: constructive, organizational and communicative components [6].

Regardless of the number of shaded components, experts agree on this. All functions of teaching activity are interrelated with each other and form the basis of the teacher's professional activity [7]. The preparation of students of a pedagogical university for independent pedagogical activity involves the mastery of all the components and this activity, as well as the development of future teachers of skills that correspond to these components (Table 1, 2).

**Table 1.** Components of pedagogical activity

Component	Description
Constructive	Involves planning and designing educational processes and materials
Organizational	Pertains to the management and coordination of educational activities
Communicative	Relates to the interaction and communication between teachers and students

**Table 2.** Functions of teaching activity

Function	Description
Gnostic	Involves the teacher's actions to understand and solve educational tasks, requiring specific cognitive abilities
Constructive	Planning and creating educational content and learning experiences
Organizational	Managing and structuring the learning environment and activities
Communicative	Facilitating effective communication and interaction with students, parents, and colleagues

The gnostic function of teaching activity is performed by the teacher at almost all phases of solving the teaching task, so it is the so-called "cross-cutting", which describes its special meaning. The implementation of this function means that the teacher performs gnostic actions, which, in turn, requires that the subject of this type of activity has adequate (gnostic) abilities [8]. Example in Pedagogical Practice: Teaching Economic Reform.

## 1. APPLICATION

### 1.1 Gnostic Function in Teaching:

The gnostic function of teaching involves the teacher's active engagement in understanding and interpreting the subject matter at all phases of the teaching process. This "cross-cutting" function highlights its special significance, as it permeates all stages of instruction.

### 1.2 Analysis and Synthesis:

Example: When teaching about economic reform, a teacher might begin by breaking down complex economic theories into smaller, more digestible parts (analysis). For instance, the teacher could divide a lesson on market deregulation into segments covering historical context, key principles, major stakeholders, and case studies.

Application: The teacher would then guide students in synthesizing this information to form a comprehensive understanding of how market deregulation impacts different sectors of the economy and society as a whole.

### 1.3 Comparative Method:

Example: The teacher could use a comparative method to help students understand economic reforms in different countries. By comparing the economic reforms in China and Russia, students can identify similarities and differences in approaches and outcomes.

Application: This method allows students to evaluate the effectiveness of various reform strategies and understand the context-specific factors that influence success or failure.

### 1.4 Induction and Deduction:

Example: Through inductive reasoning, the teacher might present specific case studies of economic reforms and guide students to derive general principles about effective reform strategies. Conversely, using deductive reasoning, the teacher could start with established economic theories and show how they apply to specific real-world scenarios.

Application: For instance, students could study the deregulation of utilities in the UK and use their observations to develop general rules about the conditions under which deregulation is likely to succeed.

### 1.5 Systematic Analysis of Literature:

Example: At the final stage of the course, the teacher could assign a systematic analysis of existing literature on economic reforms. Students might review scholarly articles, policy papers, and historical accounts to consolidate their knowledge and form evidence-based opinions.

Application: This method enables students to engage deeply with academic research, understand various perspectives, and relate theoretical knowledge to practical examples.

By integrating these methods and examples into pedagogical practice, the teacher ensures that the gnostic function is actively performed. The teacher's ability to engage in gnostic actions—such as analyzing, synthesizing, comparing, and systematically reviewing information—requires adequate gnostic abilities. This comprehensive approach not only enhances the teacher's effectiveness but also enriches the students' learning experience, particularly in complex subjects like economic reform.

Disclosure of the essence of these abilities is possible on the basis of the analysis of the concept of "gnostic activity". The gnostic component in the structure of pedagogical activity is associated with the analysis and study of the initial state of the main components of the structure of the educational process, since it is the basis for concretization and ultimate goals of education and the definition of a pedagogical problem [9].

The subject of gnostic activity is the learning system, which the teacher recognizes as an element of the general education system and as a kind of independent system of self-development and self-regulation, consisting of aggregated components: learning objectives, subject content, procedures, methods and teaching aids. The Gnostic role is the smallest unit of Gnostic activity. A product of gnostic activity is called a formed and formulated pedagogical task. The results of gnostic activity is the final solution to this problem [10].

The gnostic activity of the teacher is based on three main groups of actions: analysis of educational materials, textbooks, teaching aids and programs; control of the educational activity of students in the assimilation of the material, its analysis and evaluation, determining the level of assimilation and assimilation of the material on the subject, mastering the methods of pedagogical work, determining the presence of interest and the nature of the students' attitude to the subject; observation of their behavior in class activities in order to organize the educational



activities of students, as well as the activities of other teachers in order to study and gain positive experience from their work and conduct an appropriate analysis [19].

From the presented side, gnostic activity is considered as an activity that covers such areas as determining the level of formation and the main group of mentalities of students, characterizing the psychological background of a group of students, the level of educational motivation, and the like. The successful implementation of gnostic activity is based on a clear understanding of the final goals of learning, knowledge of the specifics of the structure of the content of the subject, the principles of its division into units and their essential features and properties as learners, as well as knowledge of the sources of possible difficulties in learning, the material presented in the textbook hit like that. Gnostic activity permeates the process of solving educational problems in the preparation and planning of the lesson, at the stage of the lesson and in the analysis of the results of the lesson [11].

Gnostic activity during classes is associated with monitoring the nature of changes, the main components of the structure of methodological tasks, a critical assessment of the result in order to make the necessary adjustments to the planned plan. After the lesson, this activity is associated with the analysis of the lesson by comparing the intended goal and the result obtained to evaluate the effectiveness of the methods and techniques used, as well as adjustments for planning the next lesson. The teacher must have a whole system of gnostic skills to perform this activity, the most important of which are the skills of analyzing a specific educational situation, analyzing educational material, observing and analyzing lessons, and introspecting a lesson [18].

Some studies show that the gnostic activity of a teacher is connected primarily with this ability to design the cognitive and practical activities of students, including the ability to challenge them, set search tasks. The first stage in understanding the conditions of the set task and its solution can be considered the diagnostic phase, when the gnostic activity of the teacher is the analysis of the initial pedagogical situation, guessing the necessary data, and formulating the task as a pedagogical task. The problem of developing the skills of future teachers is one of the main ones, the solution of which largely depends on the improvement of the entire educational process in higher education, on the choice of teaching methods and means [12].

The formation of gnostic abilities creates a prerequisite for the full use of their creative forces, abilities and talents by graduates and pedagogical universities. The formation of skills always affects the sensory, intellectual, motivational, volitional and emotional spheres of the individual. It contributes to the correct methods of educating those personal qualities that are used in this type of work. If we consider the process of the formation of gnostic abilities in more detail, it should be emphasized that at the first stage, when conditional reflexive connections are not yet strong, the possibilities of comprehension, systematization and transformation of information are realized under control. Thinking can be referred to as "cognitive activity at the highest level." Transforming information in the future creates a new mental representation [5].

As a result, we can conclude that gnostic abilities mean a proven readiness to achieve a goal in gnostic activity, realizing it under more or less strict control through thinking with consciousness of the entire system of one's main actions or part of this system. At the same time, a kind of knowledge manipulation takes place, which is combined with flowing information and knowledge of the situation changes [11].

The ability to understand, organize, and communicate information includes the student's personal ability to act in accordance with this particular cognitive system, but these skills are realized only through action and judgment, and therefore the abilities of these students can only be based on their activities. A teacher who knows the requirements of social practice for the readiness of students, provides them with a suitable system of skills and abilities, transfers their knowledge to them and organizes practical activities. Gnostic abilities, due to their "through" integrity, are necessary for the implementation of any kind of activity and are associated with the process of abstraction (verbal and visual) information, analysis, synthesis, classification and much more [13].

The procedure for developing gnostic abilities includes: abstract acquaintance with the essence, structure and category of gnostic abilities and the actual ability to use gnostic abilities. In this case, the following is important: students' awareness of the professional and personal importance of developing integral gnostic abilities; setting the goals and objectives of the upcoming gnostic activity in order to understand, decipher, systematize and transform the accepted pedagogical information, consolidate information structures, create a new information model; disclosure of the nature of understanding, systematization, communication skills, the content of these skills, the set of actions and operations that make up these competencies, and the ways in which these actions should be performed; development of a program for the formation of gnostic abilities; organization and implementation of practical measures to master the Gnostic and abilities; assessment and control of the level of formation of gnostic abilities; evaluation of the results of students' gnostic activities [5].

The effectiveness of mastering the Gnostic and abilities also depends on the deep assimilation of theoretical knowledge and practical activity based on them, on direct acquaintance with the methods and actions of their understanding. Deep assimilation refers to the thorough and comprehensive internalization of knowledge and skills. It involves not only understanding theoretical concepts but also effectively applying them in practical

situations. This process is crucial for mastering gnostic abilities, which are the skills related to acquiring and understanding knowledge.

Thus, some stages of the formation of gnostic abilities are distinguished for researchers: theoretical and practical. First of all, the theoretical training of the future specialist takes place and the skills necessary to obtain various information are formed. Such skills are formed: sensory, perceptual and skills that are used to store and process information, that is, mnemonic, mental and graphic. The theoretical stage also includes: acquaintance of students with the nature and content of gnostic abilities, which consist in the ability to understand the received pedagogical information, systematize and transform it; assessment of gnostic abilities as "cross-cutting" (integral), necessary for the implementation of any type of activity and at all stages of solving a pedagogical problem; formation of knowledge about information (reception of sensory signals) [10].

Gnostic skills have been explored by quite a few scholars. In the course of the study, an analysis of some works was carried out, in which similar issues were considered. Shcherbakova's article summarizes the materials of experimental work on the formation of the gnostic abilities of students of a pedagogical school. The conditions for the formation of gnostic abilities in the modern educational process of the pedagogical school are considered, the results of the experiment on the approval and implementation of the program for the formation of gnostic abilities of students of the pedagogical school are presented. The data presented in the study reflect the trend of the prevailing academic performance of the students of the experimental group in the process of the formation of gnostic abilities. Monitoring the effectiveness of the developed program confirmed the legitimacy of the presented provisions and the effectiveness of the conditions for the formation of gnostic abilities of students of the pedagogical faculty [14].

Sadovaya's article reveals the features of the formation of the readiness of future teachers to organize the cognitive activity of children, the role of gnostic abilities in the development of cognitive activity of students, and presents a description of the methods for forming gnostic abilities of future teachers.[16] The schemes developed by the authors can be divided into several groups: structural and logical schemes, reflecting the structure of an autonomously significant module; functional schemes that reveal the essence and logic of the pedagogical phenomenon, the dynamics of a certain process; thematic diagrams showing the attitude to the elements of knowledge, the classification of concepts, the sequence of actions; diagrams using my characters, showing objects, algorithm of actions The experience of using reference diagrams in the study of pedagogical disciplines shows that the system of connections built and fixed in the diagram creates conditions for problematic presentation of the material, promotes active perception, deep understanding of the material and the development of students' analytical skills, asynthetic activity supports assimilation of the material and generally contributes to the formation of the gnostic abilities of students [2].

Ivanova's article discusses pedagogical material within the context of teaching scientific and pedagogical discourse in a foreign language, specifically German, at the master's level. It outlines the goals of this teaching, the components of foreign language discourse education, and the unique aspects of assimilating scientific and pedagogical discourse in German. The article situates the scientific and methodological activities of students within professional speech communication, highlighting the development of gnostic abilities through step-by-step work with scientific texts in German. By focusing on two subsystems of teaching content, the research demonstrates how students' gnostic abilities critical thinking, analysis, and synthesis are cultivated, leading to a deeper understanding and improved professional communication skills [17]. When teaching discourse, it is necessary to create conditions that will be as close as possible to the real verbal communication of representatives of the pedagogical community. In the opinion of the authors, the scientific and methodological activity of students of foreign language education may be the most suitable for this requirement, since it includes the characteristics of linguistic and non-linguistic parameters of scientific and pedagogical discourse. The multi-component composition of knowledge of a foreign language in discourse requires further research and generalization in order to analyze the characteristics of possession and use [5].

Despite growing interest in the importance of non-academic skills for student achievement, very few studies have examined the extent to which schools and teachers are associated with achieving these outcomes. This descriptive study complements the emerging literature by examining the amount of school- and teacher-related variation in the acquisition and executive skills of kindergarten teachers[15]. Using direct assessment and executive function data from a nationally representative sample of 10 public school preschools, the analysis shows no difference in executive function scores among teachers in schools, but significant differences between schools. Furthermore, it shows that school-related variation in executive function and academic performance are weakly correlated, suggesting that some schools are associated with improved student achievement but not with executive function skills, and vice versa [20].

#### IV. CONCLUSION

In the course of the research, the problems stated in the article were studied in order to modernize the teaching process and successfully form gnostic skills in future social teachers in the process of media education. The specificity of student training is determined by the trends in the development of the education system as a whole (basicity, continuity, humanization), the goals and objectives of vocational education, the age and individual characteristics of students, the content and technology of working with students. Gnostic abilities are a systematic part of the professional readiness of students of pedagogical disciplines: they are organically divided into other groups of skills and determine the final effectiveness of professional training.

At the final stage of the study, the method of systematic analysis of scientific literature was used, which relates to the subject of the study. In the process of research, it was determined that gnostic abilities mean a proven readiness to achieve a goal in gnostic activity, realizing it under more or less strict control through thinking with awareness of the entire system of one's main actions or part of this system. It was determined that the effectiveness of mastering gnostic abilities also depends on the deep assimilation of theoretical knowledge and practical activities based on them, on direct acquaintance with the methods of action and their understanding.

The presented study is of practical importance for theorists and practitioners in the field of higher education. The materials that were obtained in the course of the study are valuable information. By applying the information presented in practice, it is possible to improve higher education systems in the context of the pedagogical specialty. The developed recommendations can be applied for the development of gnostic abilities in students-teachers of a social orientation.

It is important to note that the problem of the formation of gnostic skills in future social teachers is practically not disclosed either in Kazakhstani or in foreign literature. This problem is an important factor in the formation of the professional abilities of social educators. Accordingly, it is important to determine the tasks for future research in the presented direction.

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#### Author contribution

All authors made an equal contribution to the development and planning of the study.

#### Conflict of Interest

The authors have no potential conflicts of interest, or such divergences linked with this research study.

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