

The Problem Of The Formation Of Cognitive Interest To Knowledge Among Children And Youth In MALI

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Abstract: The article discusses the main points of changes that have occurred in pedagogical practice in teaching children and youth. It is noted that modern students, if they turn to traditional pedagogical technologies, they are rapidly losing interest in the learning process. The article is indicated that various innovative forms and methods are needed to increase the interest of young people in the educational process. Some of these methods are relatively rarely used in practice. The author of the article concludes that innovative technologies based on advanced pedagogical experience will serve as a worthy example for conscious subsequent application by teachers in pedagogical activity. The article points out that in modern conditions of globalization, digitalization of the educational space against the background of simultaneous unpredictable challenges of modernity in the form of lockdown, qualitatively and quantitatively new, and transformed approaches are needed to increase the level of interest of Malian students in the educational process. This is possible due to the change of the paradigm of the educational system to the humanitarian one, the eradication of the authoritarian approach to teaching, which is recognized worldwide as youth-effective and reducing interest in the learning process and to the level of assimilation of the material.

Keywords: the youth of Mali, pedagogy, motivation, interest, educational environment, learning process, knowledge.

Introduction

The interest in learning, to the knowledge gained among children and young people was recognized as a key component in their learning [1]. Learning

can be made easier by encouraging students' interest in the studied subjects by the teachers [6].

The interest in knowledge consists of the following elements (Figure 1):

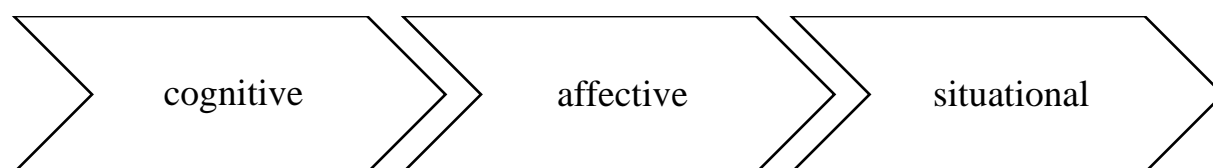


Figure 1. Elements of the formation of interest in knowledge

In this article, a four-level model of formation of students' interest is proposed. Firstly, this concept states that, students' interest in knowledge develops gradually, and that external support (for example, school practice) can stimulate interest. This also means that interest may fade or even disappear without external support.

Secondly, the four-level model of the formation of students' interest in knowledge shows that students can benefit from different types of external support from different stages of the development of interest. When students are

unfamiliar with a topic, teachers can create an environment that attracts their attention (for example, by starting a Chemistry lesson with a demonstration of a chemical reaction). However, when students have already formed interest teachers can maintain this interest through various interventions to expand knowledge of the topic and strengthen their perceived value.

The four-level model of the formation of students' interest in knowledge contains the following main components (Figure 2):

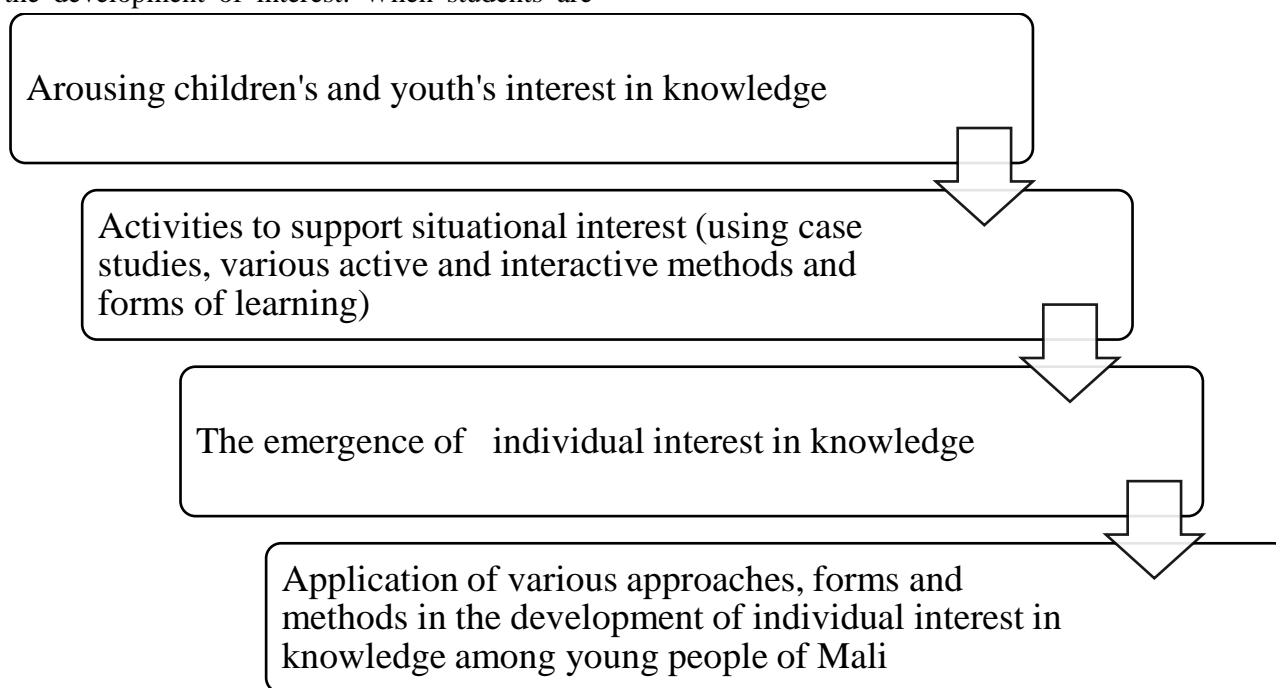


Figure 2. The main components of the four-level model

Thus, teachers can stimulate the development of new interests of students in the first two stages (caused and supported situational interest) and support or strengthen the interests of students in the second two stages (emergence and well-developed individual interest). In addition, accordingly, teachers can stimulate motivation, forming the level of its stability and students' achievement, which can be measured and evaluated [17].

The context of the content can be flexible even with content restrictions on what students should learn. **Personalized contexts connect new content with the already existing individual interests of children and young people in Mali.**

We found in the process of conducting research in this cohort that students who are given personalized tasks and exercises work harder and show better results and it is the most pronounced positive effect for students than students with low

personal interest in the subject area and experiencing difficulties in learning. Teachers' personalization interventions can be characterized by three parameters: depth, size and ownership.

Depth of teacher's intervention refers to the quality of communication with the existing interests of students. Here, interventions range from simply inserting superficial information about students' interests in developing contextual tasks related to students' interests and hobbies. In addition, depth of teacher's intervention depends on the homogeneity of the audience and whether broad categories of personalization are relevant to a broad audience or small subgroups of students who would benefit from more individualized personalization. This refers to the degree of autonomy in creating personalization.

New topics may require support from a teacher or other students to provide ideas for personalization, but students can also play a role in personalizing their learning and it can create the deepest connections. For example, some groups of students benefit when the presentation of a scientific topic focuses on to their level of training, which is an important cognitive interest for this cohort sample. An intervention aimed at integrating topics in a science course will be a deep, large-scale personalization because it is aimed at the well-developed interests of a group of students.

In addition, this intervention can be implemented with little involvement (for example, if the teacher provides information about how the knowledge gained can be implemented by students in their subsequent activities). Such a combination of the depth and correspondence of acquired knowledge with students' own identification characteristics best corresponds to the existing interests of students and these concepts should be taken into account when planning activity to personalize educational material.

The challenge and maintenance of cognitive and situational interest is realized with problem-oriented learning. Problem-oriented learning is a teaching method that creates the need to solve a real dilemma that has arisen in the process of teaching knowledge to children and youth in Mali [2]. From the point of view of the theory of interests, problem-oriented learning provides a learning environment that can arouse and maintain cognitive and situational interest of students.

Firstly, the problem presented to the students highlights the lack of critical knowledge needed to solve the problem; it can cause the students' cognitive interest.

Secondly, the search for answers to the problem stimulates inquisitive questions - questions arise by themselves and can contribute to the development of a deeper interest. At the same time, teachers who require students to acquire and systematize new knowledge on the topic can contribute to both cognitive interest and learning in general.

Previous researches of problem-based learning provide insight into how to create learning problems that arouse the students' cognitive interest. Working with students shows that problems can be effective for identifying cognitive interest, but this interest may decrease as soon as students find the answer to the problem [17]. Thus, the stimulating problem itself may not be enough to maintain cognitive interest. The stimulating problem needs to be maintained and supplemented in the educational process, which is feasible, but the teacher needs additional efforts.

There are complex tasks to increase the level of cognitive interest in children and young people of Mali in meta-analysis. They were more effective in facilitating their learning than well-structured tasks. Indeed, the problem, which became more complicated as students learned

more about potential solutions, repeatedly aroused cognitive interest throughout all classes, and the problem did not decrease after the discovery of a potential solution.

Consequently complex problems that are built on their own and constantly force students to ask additional questions can repeatedly arouse cognitive interest, maintain tension, stimulate students' inner need, and contribute to the formation of healthy curiosity about cognition, overcoming obstacles that inevitably arise in the process of learning and comprehension of new educational material. The theory of the formation of cognitive interest in knowledge among students, is assumed that there is another very effective and innovative way to fix and maintain the motivation of students, it considers to help them find the true meaning and value of their education [9].

Extensive experimental researches have documented the importance of beliefs related to values, defined as perceived usefulness and relevance for the formation and development of

students' personality, as well as for both short-term and long-term purposes. When students realize the value of the topics they study, they show more interest, work harder, stay longer at an educational institution and they attend additional courses. The surveyed students who see the value of the field of study experience more involved in the learning process, students demonstrate a more positive attitude to the tasks proposed by the teacher and more self-identified with the field of study [17].

The perception of value plays a key role in another well-known theory of motivation: **the theory of expected value**. According to this theory, students choose difficult tasks that require perseverance in learning. If they value the task and themselves based on faith in themselves, in their skills and abilities, they will be able to succeed in difficult tasks.

Beliefs about oneself and about the value of the task in the learning process form students' cognitive interest in knowledge. The value of the task includes (Figure 3):

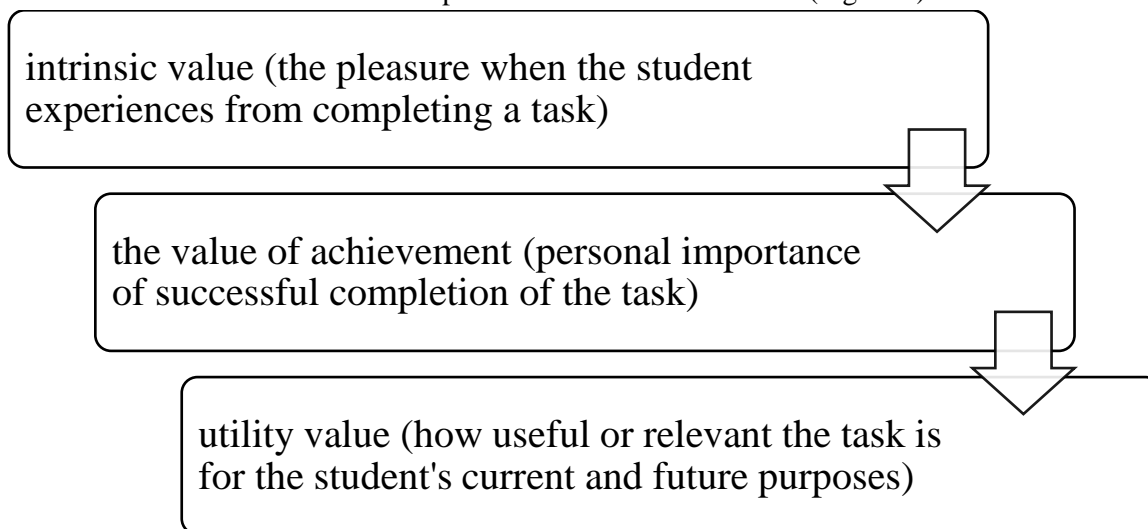


Figure 3. Components of values tasks in the process of learning among children and youth of Mali

Intrinsic value is closely related to situational interest, and both intrinsic value and the value of achievements determine academic cognitive interest and perseverance. However, the value of

utility is an ideal trigger for the formation of a holistic interest, including cognitive interest, because the value of the task in the learning process is most susceptible to external influence.

The research was performed to determine the level of formation of cognitive interest in knowledge among young people. The research's participants were children and young people of Mali. 280 people took part in the research.

The condition for the respondent's admission to the survey database was the regular presence of the student in the classroom, it allowed him to be involved not only within the schedule of classes, but also more widely – to participate in the survey, to help prepare options for active and interactive forms of learning, to develop tasks for project activities, to discuss the most appropriate, in the opinion of the students themselves, forms and methods of increasing their cognitive interest in knowledge, the learning process. All this was carried out with the consent of the students themselves. No one expressed rejection of the proposed interaction.

The purpose of the ascertaining stage is to identify the degree of formation of the cognitive interest of children and young people of Mali in knowledge. As a result of an analytical review of research sources, criteria and indicators of the formation of cognitive interest in the knowledge of

children and youth of Mali, the following criteria have been identified:

- Motivational criterion is an indicator of professional and cognitive motives,
- Orientation criterion is an indicator of features of knowledge acquisition,
- The operational criterion characterizes the students' mastery of the system of skills and abilities. Indicators of the formation of cognitive activity are the composition and quality of the operations performed, their awareness, completeness and completeness, consistency, degree of complexity, degree of generality, degree of independence, time of execution,
- Volitional criterion is indicators characterizing the presence of arbitrary regulation of the process of cognitive activity: self-determination (conscious deliberate planning by a person of his actions in accordance with his own desires, with a sense of duty); self-initiation and self-inhibition (a command to yourself to implement or terminate the action).

The diagnosis of the formation of cognitive interest in knowledge was carried out using empirical methods (Figure 4):

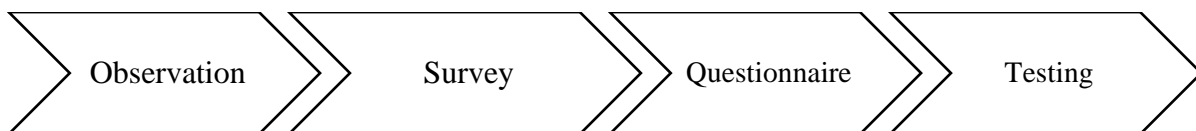


Figure 4. Empirical methods used at various stages of the experiment

At the ascertaining stage, the motivation of children and young people to acquire knowledge in the process of learning in Mali was diagnosed due to the fact that the formation of interest in knowledge depends on the motives of children and young people of Mali to the educational process,

their involvement in the educational process and the formed cognitive interest.

Conducting a study on the criterion of motivation, we focused on determining the motives that determined the formation of the cognitive interest of children and young people of Mali in knowledge (Figure 5):

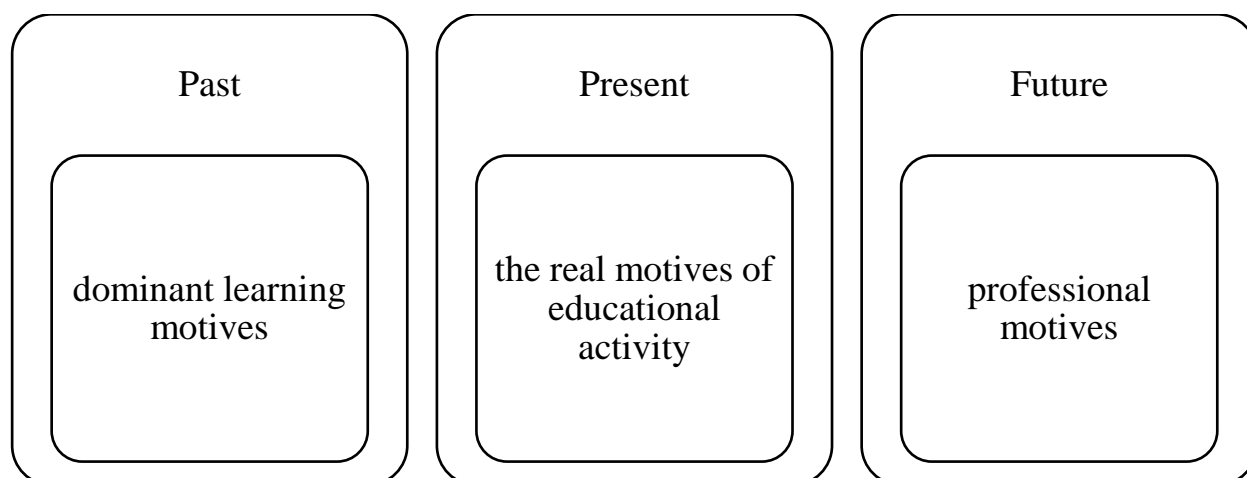


Figure 5. Distancing the motives of children and youth of Mali to the formation of cognitive interest in knowledge

To determine the motivation for choosing an educational institution, the original methodology of T. A. Zhukov was used. As a result of the survey

of children and youth of Mali, the following results were obtained (Figure 6):

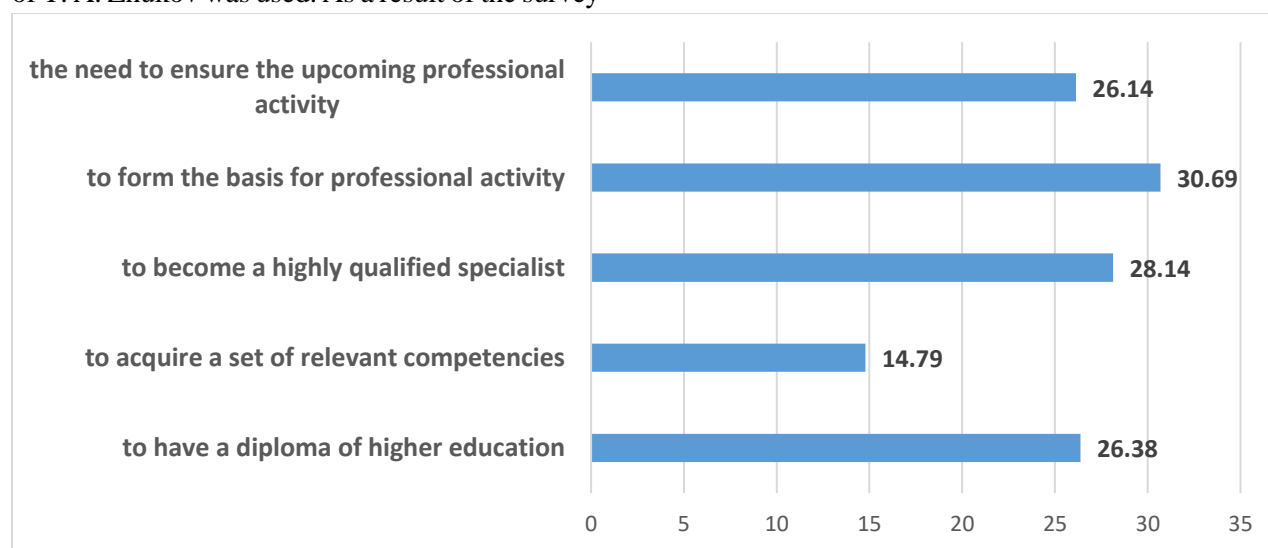


Figure 6. The results of the diagnosis of motivation for choosing a place of study (%)

As we can see from the data presented in the histogram of Figure 6, 28.14% of Malian students chose a place of study due to its certain attractiveness, 26.38% of students were motivated by a desire to have a document on the availability of education with a likely subsequent employment or continuation of studies.

And 26.14% of students noted that the main motive for entering the specialty was the

need to ensure the upcoming professional activity. Considering the motives for choosing a particular educational institution, 12.86% of students indicated a convenient location (neighborhood to home).

Further, we conducted the experimental part of the research and reliably confirmed the data from the survey of young people in Mali, as well as we identified relevant information about the

actual motives of educational activity, we used the test method “Motivation of teaching students of a pedagogical university” (S. A. Pakulina, M. V. Ovchinnikov) [14].

In the process of analyzing the results of the experiment, we took into account the internal and external motives of children and young people of Mali for the formation of a stable cognitive interest in the acquired knowledge (Figure 7).

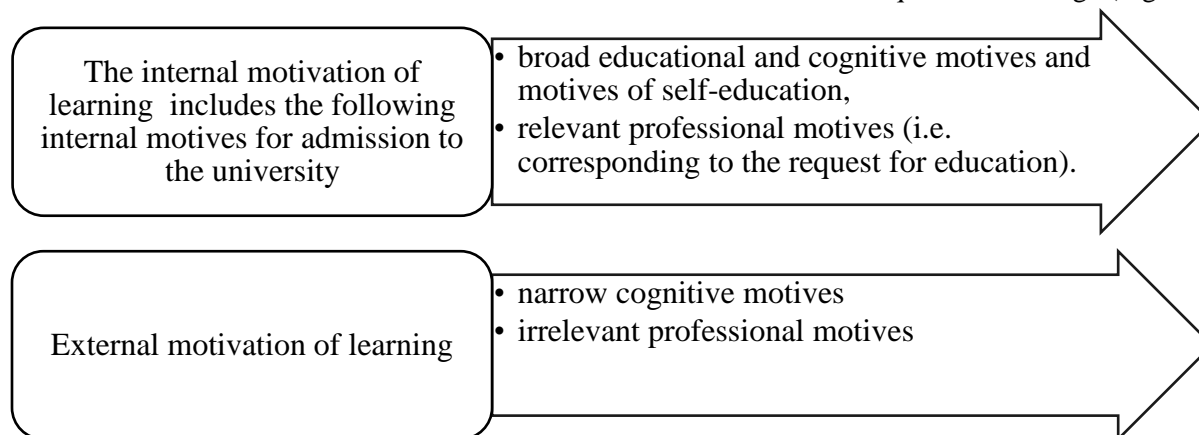


Figure 7. The totality of exogenous and endogenous motives of students

We received the following data the motivation of students' learning at the stage of the ascertaining experiment during the research (Figure 8).

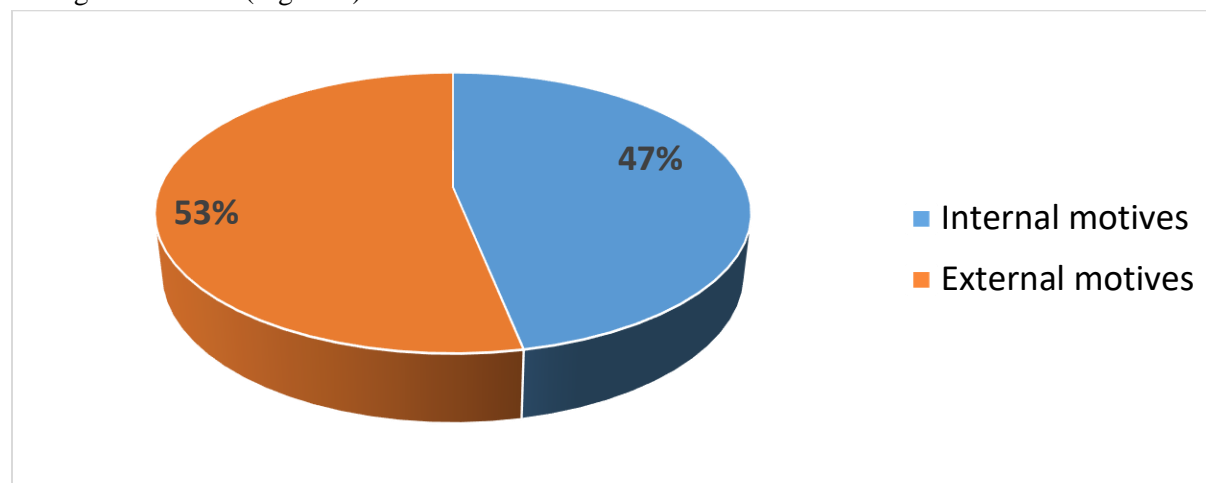


Figure 8. The results of studying the motivation of students' learning at the stage of the ascertaining experiment

It follows from Figure 9 that internal motives that have a direct correlation with the formation of

cognitive interest in knowledge were found in 47% of students of Mali (Figure 9).

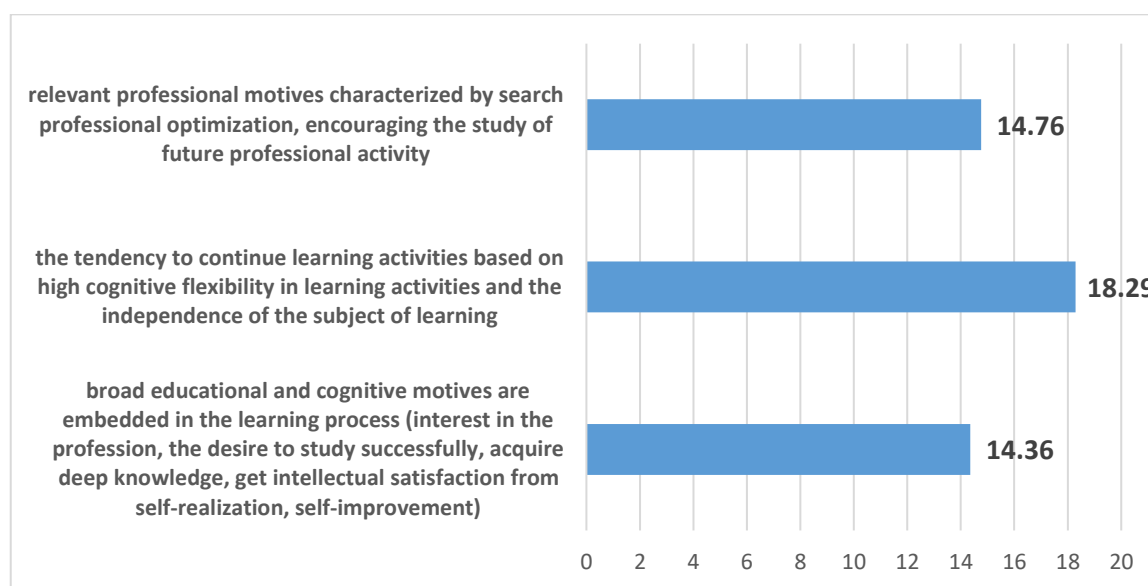


Figure 9. The results of the ascertaining experiment concerning differentiated internal motives for the formation of cognitive interest in knowledge in children and young people of Mali (%)

The third group of students is characterized by a preference for complex and large-scale tasks. They are ready to spend time and resources to find a creative, non-trivial solution to the task.

As follows from the results obtained, the predominant number of students has an external (exogenous) motivation. Motivation is not conditioned by the educational process, and originates outside of the educational process in educational institutions of Mali, expressed in the implementation of such types of educational activities that will allow achieving the approval of others, to develop a positive image of a well and excellently performing student among the teaching staff.

A similar type of motivation was revealed in 18.29% of students (these types of aspirations are characteristic of students, most of them studying according to standardized traditional

methods, where obedience, discipline, diligence are encouraged) [8]. These students choose simplified methods and methods of studying educational materials, including cheating, which require minimal resources (time, material). Their cognitive interest in acquiring knowledge is extremely low.

As a result, it should be noted that the predominant number of students does not have a professional and cognitive motive, which, according to numerous studies, directly correlates with the formation of cognitive interest in knowledge in children and young people during the educational process [13].

Further, the teaching staff was asked to indicate the cognitive interest of students in knowledge at seminars and practical classes. The following results were obtained (Figure 10):

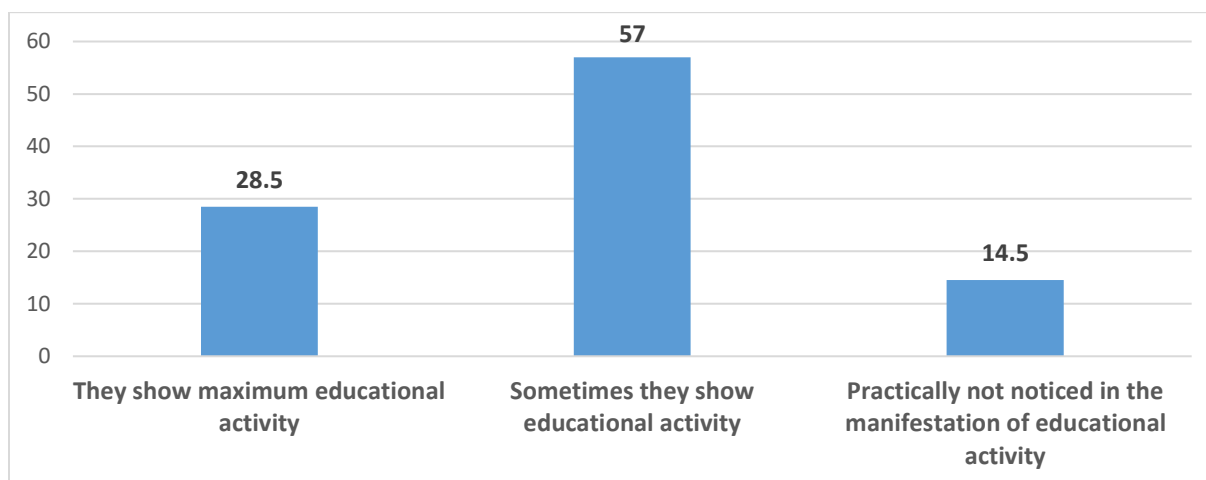


Figure 10. Cognitive interest of students in seminars and practical classes, indicated by the teaching staff at the stage of the ascertaining experiment (%)

To comment on the results obtained, it is important to note that the cognitive interest in knowledge among students is largely due to the professionalism of the teacher, the interest that he managed to awaken in students. Those teachers who use active and interactive methods and forms of teaching in the educational process achieve higher values of the formation of cognitive interest in knowledge.

Also, the level of formation of cognitive interest in knowledge among children and youth of Mali depends on the specifics of a particular

discipline, as well as the personal qualities of teachers – their authority, external image, and ability to eloquently convince students and give relevant, interesting arguments based on reliable, verified sources characterized by novelty. Foreign scientific sources, mainly from Europe and the USA, are of particular value in the eyes of modern students of Mali.

A survey of teachers was conducted to determine the degree of assimilation by students of the educational information received from the teacher in the form of lecture material (Figure 11):

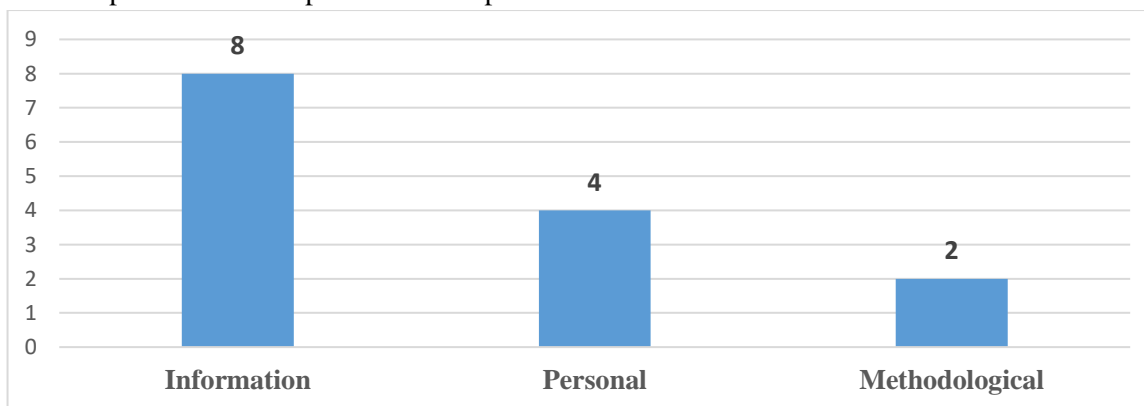


Figure 11. The result of the ascertaining stage of the experiment on monitoring the level of cognitive interest in knowledge among children and young people of Mali

The features of the formation of cognitive interest in knowledge among children and youth of Mali at various levels are shown in Figure 12.

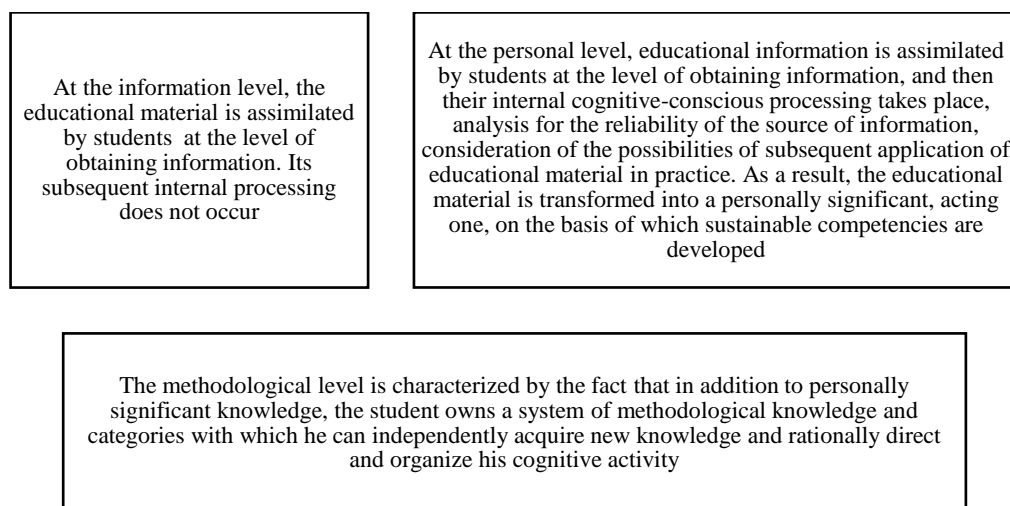


Figure 12. Features of different levels of formation of cognitive interest in knowledge among children and young people of Mali

The cognitive interest of children and young people in Mali in knowledge is assessed based on the level of formation of their skills:

- **Special skills:** analysis (the ability to identify parts and relationships between them, to see the logic of reasoning), synthesis (the ability to combine individual elements into a whole), comparison (the ability to identify similarities and differences),
- **Meta-skills:** analytical (the ability to analyze one's cognitive activity and the results of cognitive activity carried out on its basis), design (the ability to set goals and accept self-education tasks, search for ways and ways to solve them), organizational (the ability to organize active independent cognitive activity), communicative (the ability to interact with teachers and fellow students in the process of teaching-cognitive activity).

In the course of the research, we conducted a survey of students and teaching staff to determine the level of formation of these skills. From the analysis of the results obtained, it follows that students rate their own formation of meta-skills and special skills higher compared to their own teachers. Thus, there is a certain degree of subjectivity in the perception of the studied

qualities. On average, the indicators differ by 8-12%. This is a rather large discrepancy in the perception of skills and meta-skills that have the most direct impact on the formation of a stable cognitive interest in knowledge among children and young people of Mali.

Thus, cognitive interest in knowledge is at the same time increased attention, effort and affect in relation to a particular object or topic, as well as a stable predisposition to involvement over time. The integration of these two definitions directs interventions that generate or maintain interest. Interventions related to cognitive interest include attention-grabbing situations, contexts of prior individual interest, problem-based learning, and utility enhancement of learning.

The cognitive interest of children and young people of Mali in knowledge is necessary to achieve academic success. The training of teachers, the stimulation of interest and responsibility contribute to the interested, motivated education of children and young people of Mali in the process of acquiring knowledge that will allow them to effectively carry out their professional activities later.

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