European Proceedings of
Social and Behavioural Sciences
EpSBS

www.europeanproceedings.com
e-ISSN: 2357-1330

DOI: 10.15405/epsbs.2021.07.02.19

EdCW 2020
International Scientific and Practical Conference Education in a Changing World: Global Challenges and National Priorities

COGNITIVE INTEREST AS AN ACTIVATOR FOR THE DEVELOPMENT OF TEACHER LEADERSHIP QUALITIES

Elena Ponomarenko (a)*
*Corresponding author

(a) Irkutsk State Agrarian University named after A.A. Ezhevsky, Irkutsk, Russia, alyonapon@rambler.ru

Abstract

The article dwells on constructing more effective forms, models, ways, and conditions for teaching and fostering the desire for learning. New approaches to teaching require new criteria for a teacher personality thus forming a new-generation teacher, with a new type of thinking. A cognitive interest may be a contributing factor to this process. First of all we have to motivate students' interest in learning which is based primarily on scientifically oriented higher education content components. As any psychic process and even as a personality orientation, a cognitive interest is formed in the course of activities. Against the background of a positive attitude towards learning, learning activities and persons and objects involved therein, the learning process organized by a teacher leader also allows developing leadership qualities among students through a cognitive interest. The efforts involved in developing teacher leadership skills through a cognitive interest is worthy in all respects – it improves knowledge, favors a teacher personal development, helps to overcome difficulties, affects the entire nature of work improving the ways of working, favors further education and self-education, and improves a high-school teacher's personality as a whole. According to the author, it has a positive impact on the students and allows improving the quality of education.

Keywords: Activity, cognitive interest, leadership skills, personality, teacher

https://doi.org/10.15405/epsbs.2021.07.02.19
Corresponding Author: Elena Ponomarenko
Selection and peer-review under responsibility of the Organizing Committee of the conference
eISSN: 2357-1330

1. Introduction

In any teaching, there is a special type of interest - interest in knowledge, or, as it is commonly called, cognitive interest. Its area is cognitive activity, in the process of which there is a mastery of new information and the necessary methods or skills and abilities with the help of which people receive education. As a complex and very important notion, a cognitive interest has many interpretations in its psychological definitions and is considered as: a selectivity of human attention; manifestation of human mental and emotional activities; activator of different feelings and qualities including leadership. Cognitive interest is the most important personality formation, which develops in the process of a person's life, is formed in the social conditions of his existence and is in no way immanently inherent in a person from birth. The value of cognitive interest in the life of specific individuals can hardly be overestimated. Interest acts as the most energetic activator, stimulator of activity, real objective, educational, creative actions and life in general (Burenina, 2015). In addition, at a higher level of its development, cognitive interest, being quite strong, stable, occupying a dominant position in the circle of other motives, becomes a property of personality, which is called curiosity, inquisitiveness. Here, the interest is already the result of learning. Teachers, noting the indifference of students to knowledge, unwillingness to learn, low level of cognitive interests, try to design more effective forms, models, methods, conditions of learning. However, activation often comes down to either increasing control over students' work or trying to intensify the transmission and assimilation of the same information through technical means of learning, computer information technology, mental reserve capabilities. Therefore, in order to interest a student, the teacher must first develop an interest in learning new things. A large amount of knowledge also generates leadership skills, which in turn help the teacher to guide students to active learning and thus improve the quality of education.

An interest to cognition which is referred to as a cognitive interest is one of the activator for generating new knowledge (Garrison & Kanuka, 2004). As we can see, its scope is learning which involves obtaining new information and appropriate ways or skills and abilities through which a teacher can develop his leadership qualities and foster these leadership qualities in the students.

2. Problem Statement

From the standpoint of scientific and pedagogical significance, cognitive interest is an important factor in improving any activity and at the same time an indicator of its effectiveness and efficiency, since it stimulates independence, cognitive activity, creative approach to the study of material, encourages self-education. Psychologists agree that the core of personality as a subject of conscious activity is the motivational sphere of a person and, above all, his interests and needs (Bandura, 1977).

Nowadays, when about 5% of theoretical and 20% of applied knowledge is updated annually, it is of particular importance to make the students interested in the cognitive process and in the ways of search, learning, processing and use of the information which would allow them to be participants in the teaching process and be comfortable with the contemporary rapidly changing world. And this is only

https://doi.org/10.15405/epsbs.2021.07.02.19
Corresponding Author: Elena Ponomarenko
Selection and peer-review under responsibility of the Organizing Committee of the conference
eISSN: 2357-1330

possible for a teacher leader who could manage the desire for knowledge properly and help in knowledge application (Baran, 2014; Belinova et al., 2017; Bicheva et al., 2017).

In our country, the problem worsens due to rapid socioeconomic changes which result in the declining prestige of education and in a shift in interest towards material benefits, the possession of which does not depend upon the education obtained.

Nowadays one can observe an indifference to learning, unwillingness to study and a low level of cognitive interest development so that it is necessary to construct more effective forms, models, ways and conditions for teaching and create a desire for learning. That's why we need teachers - leaders who can act as guides in improving teaching, bringing the education system to a higher level (Grunefeld et al., 2015; Phillips et al., 2018).

3. Research Questions

- How does cognitive interest in learning affect the development of leadership skills?
- Does the specific combination of emotional-volunteer and intellectual processes that raise awareness and improve pedagogical activity represent cognitive interest?
- Is it possible to use the example of teaching the discipline “Environmental and economic assessment of the areas” to show how cognitive interest forms the leadership qualities of both teacher and students?

4. Purpose of the Study

This paper considersa cognitive interest as the most important part of personality development which occurs during the activities of daily living and activates the leadership qualities of a person in the field of education.

One may say that the interest acts as:

- a selectivity of psychic processes with regard to objects and phenomena of the surrounding world;
- a tendency, a desire or a need to be engaged in the scope of the phenomena and activities which brings satisfaction;
- a strong stimulus for personality activity, whose influence makes all psychic processes especially intensive and intense, and activities – exciting and productive;
- a major activator for the development of leadership qualities.

In education and teaching there is a specific type of interest – an interest in learning which is commonly referred to as a cognitive interest.

https://doi.org/10.15405/epsbs.2021.07.02.19
Corresponding Author: Elena Ponomarenko
Selection and peer-review under responsibility of the Organizing Committee of the conference
eISSN: 2357-1330

5. Research Methods

To achieve the goal of research, we considered different active methods of development of a cognitive interest in the process of "Ecological and economic assessment of the areas" discipline teaching and analyzed the MOTIVATION – COGNITION – REFLECTION model as both cognitive interest activator and, therefore, as teacher and student leadership qualities development.

6. Findings

A teacher, like a doctor, has to follow "Do no harm" principles. These requirements are transformed into the key orienting statement: the teaching should be performed under conditions of the respect for the personality of a student, for his individuality, desires and achievements and be compatible with a teacher's unconditional refusal to use teaching methods, approaches or aids which can have a negative impact on health of the students, their self-respect and confidence in their abilities and capabilities (Fokin, 2007). That is why it is very important to include a stimulus for activity into the teaching process. Unconditioned reflexes do present in humans when a motion is due to an external stimulus, but this is a degenerated case of activity, so to say. In all other cases an external stimulus only starts a program of decision making but the motion itself is to some extent related to an internal program of a human (Daniliuk, 2011). In case of complete dependence on it we deal with the so called "arbitrary" acts when the initiative for beginning and the content of motion are assigned inside an organism. First of all we have to develop an interest for learning information. And most of the information is based on scientifically oriented higher education content components. However, the higher education content may also include the elements which are not based on scientific developments (works of art, performance practice, history etc.) that prevent the need for using a science-based approach to all phenomena and studied objects (Nicol et al., 2014). However, a cognitive interest is favored by the demonstration of the latest scientific achievements. The presentation of the material is not always easy for a teacher. But in this case, the very process of action acts as another equally important source of a cognitive interest. In order to feel the urge to go further, one must cultivate a love for learning which implies the ability to find attractive features in the process itself, with positive emotions contained in teaching and learning new information.

Besides, the development of a cognitive interest can be favored by a surprise. A surprise is a strong stimulus for learning, its primary element. When surprised, a person wants to look forward, i.e. he is expecting for something new.

A teacher also should ask himself questions which require answers. And questioning is certainly indicative of a cognitive interest. A self-asked question implies a search and an active desire to find a root cause. An inert, quite indifferent teacher does not ask questions, with his intellect remained undisturbed with unsolved problems.

Another interest-development factor is an own wish of a teacher to participate in activities, discuss questions the students ask at the lessons, add statements, and make his views known. This also involves

https://doi.org/10.15405/epsbs.2021.07.02.19
Corresponding Author: Elena Ponomarenko
Selection and peer-review under responsibility of the Organizing Committee of the conference
eISSN: 2357-1330

an active operation with the knowledge and skills obtained and desire to share new information with others (Kodzhaspirova & Petrov, 2010).

As a result, a theoretical analysis of the problem mentioned and best teaching practices prove that the most constructive solution is providing such teaching and learning conditions which allow a person to take an active personal position, and represent the best way to do teaching activity and his individual self. All this gives rises to the formation of basic mechanisms of thinking and consciousness – analysis, planning and reflection.

A cognitive interest of a teacher and his leadership position are also favorable to the development of active teaching methods. And active learning is one of the indicators of education quality (Gigliotti, 2017). In our case, active teaching implies using a system of methods which are aimed largely at an independent knowledge and skill acquisition during practical and theoretical learning activities rather than at memorization and reproduction of existing knowledge given by the teacher. Specific features of active teaching methods are based on motivation for practical and theoretical learning activities without which there is no progress of knowledge acquisition (Kubarkova, 2012). The use of active teaching methods allows not only giving students knowledge but also provides the development of cognitive interests and abilities, creative thinking, and skills and abilities for intellectual work on their own. Let's take the example of "Ecological and economic assessment of the areas" discipline. When teaching this discipline, we use the following methods:

1. *Non-imitational* (the lack of a model of the process or activity studied, with activating teaching through creating direct and indirect relationships between a teacher and a student). For example, these are thematic or problematic discussions. One of the problematic topics discussed on our subject is "Indication methods for EEAA", when the students try to answer the question about alternation criteria that can be used as indicators of anthropogenic and natural land degradation. The teacher proposes his own criteria and the students try both to agree and disagree with them, or the students propose their own criteria with which the teacher disagrees. Finally, they choose the alternation criteria most acceptable for this or that area.

2. *Imitational* (the presence of a model of the process studied; imitation of individual and collective activity). For example in some EEAA classes we give a characteristic of the land-use natural and technogenic conditions. Each student gives such characteristic of the studied area in the ready-made form of a table and tries to make analysis on the results obtained, i.e. to determine whether the use of land as an economic activity is possible.

3. *Non-playful* are mostly research methods. A research method is a method for motivating students' learning, independent search for answers to questions, and creative self-expression. Some teachers believe that a research method is unavailable for most of the students and can only be used by a few of them. However, practice shows that this method is justified. The students participate actively in a research study when they encounter interesting problems and world's mysteries. This involves elementary searching methods – no one expects the students to make discoveries contributing to science. This is creative work. The research method teaches the students to think and to find solutions for problems by themselves.

https://doi.org/10.15405/epsbs.2021.07.02.19
Corresponding Author: Elena Ponomarenko
Selection and peer-review under responsibility of the Organizing Committee of the conference
eISSN: 2357-1330

It is necessary to motivate students to do independent work. For example, in "Specially protected natural areas" class a student asks why a circle is the most common shape of design for natural parks. Thus he encounters a problem and does not have a ready answer to it; a teacher guides and coordinates a search activity, selects relevant literature for independent studying, with practical independent research activities planned and conducted, and conclusions and generalizations made. The student gradually gives his own answer to the question he asked. When the work is over, the student should be provided with the possibility to share the results of his activity with his classmates– to make a class or a conference presentation– as it is very important for students' personal growth. As practice shows, a little bit of independent research generates students' interest and desire to learn more about protected lands, as perceived in this particular case; it is also noted that there is a significant increase in the cognitive level of students who did even a little bit of research.

An independent work is an ambiguous concept; it may have different forms, methods and techniques (Gordeeva et al., 2017). The techniques applied might be as follows. When the teacher explains new material, for example, on "Alternative land uses", he may ask why there should exist several alternative types, what lands will be used for economic activities, what would occur if there is no economic activity etc. All students' answers are accepted, considered and jointly analyzed, and the conclusions are made. The students may be also asked to provide an independent assessment of economic development of the studied area and to make a conclusion. Or the material explanation is followed by asking questions (a written form is also possible), and the homework given includes studying the prospects of economic development in the investigated area. The next version involves demonstrating visual aids, photographs etc. and asking what area is shown therein and what land-use type it is related to. The students not only consolidate learning but also speculate, search for an original answer, and actually participate in the process of cognition acquiring knowledge and skills.

Effective and developmental techniques promoting mental activity and improving all kinds of memory, attention, perception and speech are those based on contradictions – a well-known theory of inventive problem solving. These techniques are very simple but highly efficient. Such techniques teach the students to think beyond stereotypes, help to develop flexible and non-standard thinking and imagination. The method of brainstorming (brain attacks) is widely used to produce new ideas for problem solving. It is aimed at organizing collective mental activity to search the ways to solve problems (Bacca et al., 2014).

The task of a leader teacher is to arouse students' curiosity and consistently maintain their interest in the subject understandable from the perspective of the logic of training content due to the use of methods for searching information and proving knowledge; a student is got excited about learning through the pursuit of knowledge and enjoys an independent non-standard problem solving.

A teacher poses a problem, reveals internal contradictions which block the solution to this problem, speculates, proves, rebuts objections, if there are some, and makes an experiment, i.e. shows the way towards cognition of things and the solution of a problem. Among the ways of creating problem situations are students' facing life phenomena and facts requiring explanation, and practical work. And this is impossible without development of a cognitive interest of a teacher.

https://doi.org/10.15405/epsbs.2021.07.02.19
Corresponding Author: Elena Ponomarenko
Selection and peer-review under responsibility of the Organizing Committee of the conference
eISSN: 2357-1330

7. Conclusion

Thus, the work expended on the development of a cognitive interest completely justifies itself – it improves the quality of knowledge and personal development of a teacher, helps to overcome difficulties, influences the entire nature of work improving its ways, favors the continuation of education and self-education, and improves the level of teacher personality as a whole. And the development of a cognitive interest promotes the development of leadership qualities.

A leader teacher leads a student and provides him with the opportunity of further development. It should also be taken into account that if there is a lack of motivation for high but attainable intellectual intensity, the learning randomly turns into a process of mechanical reproduction of knowledge, and a student's intellectual development slows down. Consideration should be given to individual characteristics of each student which implies using a student-based learning approach.

Acknowledgments

This work was carried out within the framework of the European Commission (EC) project "DeSTT - Development of Skills and Teachers Training for Leadership Project" (Reference Number: 609905-EPP-1-2019-1-IT-EPPKA2-CBHE-JP). The authors are grateful to the EC for financial support for the publication of this article.

References

Bacca, J., Baldiris, S., Fabregat, R., Graf, S., & Kinshuk, A. (2014). Augmented reality trends in education: A systematic review of research and applications. *Educational Technology and Society*, *17,* 133-149.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191-215.

Baran, E. (2014). A review of research on mobile learning in teacher education. *Educational Technology and Society*, *17*(4), 17-32.

Belinova, N. V., Bicheva, I. B., Kolesova, O. V., Khanova, T. G., & Khizhnaya, A. V. (2017).Features of professional ethics formation of the future teacher. *Revista ESPACIOS*, *38(*25), 9.

Bicheva, I. B., Chelnokova, E. A., Judakova, O. V. & Careva, I. A. (2017*).* Professional'noe razvitie lichnosti uchitelya v sovremennyh usloviyah [Professional development of the identity of the teacher in modern conditions]. *Problems of modern pedagogical education*, *54*(4), 16-22.

Burenina, V. I. (2015). "Kreativnaya kompetentsiya" i "tvorcheskii potentsial" pedagoga: sravnitel'nyi analiz terminov ["Creative competence" and "creative potential" of an educator: a comparative analysis of the terms]. *Pedagogical Journal*, *6*, 10-19.

Daniliuk, A. Ia. (2011).Principy modernizacii pedagogicheskogo obrazovaniya [Principles of modernization of the pedagogical education]. *Russian Education & Society*, *53*(11), 10-25.

Fokin, Yu. G. (2007). Teoriya i tekhnologiya obucheniya: deyatel''nostnyj podhod: [Learning theory and technology: activity approach] (2nd ed.). Akademiya Publishing Center.

Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *Internet and Higher Education*, *7*(2), 95-105.

Gigliotti, R. A. (2017). An exploratory study of academic leadership education within the association of American Universities . *Journal of Applied Research in Higher Education*, *9*(2), 196-210.

Gordeeva, T. O., Osin, E. N., Suchkov, D. D., Ivanova, T. Yu, & Bobrov, V. V. (2017). Self-Control as a Personal Resource: Determining Its Relationships to Success, Perseverance and Well-Being. *Russian Education and Society, 59*(6), 231-255.

Grunefeld, H., Tartwijk, J., Jongen, H., & Wubbels, T. (2015). Design and effects of an academic development programme on leadership for educational change. *International Journal for Academic Development, 20*(4), 306-318.

Kodzhaspirova, G. M., & Petrov, K. V. (2010). *Tekhnicheskie sredstva obucheniya i metodika ih ispol'zovaniya* [Teaching aids and their use]. Akademiya Publishing Center.

Kubarkova, N.V. (2012). Liderskie kachestva uchitelya: osnovnye moment i struktura [Teacher's leadership qualities: main points and structure]. *The Emissia. Offline Letters.* Electronic scientific edition (scientific and pedagogical internet magazine). http://www.emissia.org/offline/2012/1772.htm

Nicol, D., Thomson, A., & Breslin, C. (2014). Rethinking feedback practices in higher education: a peer review perspective. *Assessment and Evaluation in Higher Education*, *39*(1), 102-122.

Phillips, C., Bassell, K., Fillmore, L., & Stephenson, W. (2018). Transforming leaders into stewards of teaching excellence: building and sustaining an academic culture through leadership immersion. *Contemporary Issues in Education Research*, *11*(1), 1-10.