

ISSN: 2357-1330

https://doi.org/10.15405/epsbs.2019.12.02.5

### 8th icCSBs 2019

# The Annual International Conference on Cognitive - Social, and Behavioural Sciences

## INFOCOGNITIVE TECHNOLOGIES IN AXIOLOGICAL LINGUISTICS AND LINGUODIDACTICS

Elena V. Arkhipova (a), Galina Yu. Dziubko (b), Lyudmila V. Ilyukina (c), Lyudmila V. Lagunova (d)\*, Vitalii A. Lavrentev (e), Natalia V. Sofronova (f)

\*Corresponding author

(a) Ryazan State University named for S. Yesenin, 46 Freedom str, Ryazan, Russia, e.arkhipova@365.rsu.edu.ru
(b) Ryazan Higher Airborne Command School named after General of the Army V.F. Margelov, 1 The area of Army
General V.F. Margelova, Ryazan, Russia, dg108@mail.ru

(c) School № 44, Lenin Komsomol str, Ryazan, Russia, ilv72@yandex.ru

(d)Ryazan Institute of Educational Development, 2a Uritskogo str, Ryazan, Russia, logunova 1@mail.ru,

(e) Ryazan State University named for S. Yesenin, 46 Freedom str, Ryazan, Russia, vitalij37@yandex.ru (f) Ryazan Higher Airborne Command School named after General of the Army V.F. Margelov, 1 The area of Army

Ryazan Higher Airborne Command School named after General of the Army V.F. Margelov, 1 The area of General V.F. Margelova, Ryazan, Russia, sofronov igor@mail.ru

#### Abstract

Modern education is characterized by emphasis on the axiological problems caused by the task of personality development. Linguodidactics has not fully embraced the ideas of the infocognitive and axiological approaches. The question to be studied deals with the concept of infocognitive didactics as applied to solving axiological problems of teaching the native language with the help of modern infocognitive technologies. To consider the axiological and infocognitive approaches in the framework of linguistics and linguodidactics, to determine the prospects of integrating these approaches in the process of teaching the native language, to identify the conditions for the effective use of new educational technologies, to trace the features of their implementation. In the study we considered the axiological aspects of language learning, revealed the correlation of value and language pictures of the world; clarified the concept of infocognitive linguodidactics (infodidactics), developed a multi-level gradual system of exercises, suggested infocognitive forms and means of teaching the Russian language that implement the value approach in philological education. Modern society, which is called cognitive, needs a new, infocognitive didactics, contributing to the value orientation of the individual in the dynamic flow of information. By infodidactics we understand the organization of value-oriented language learning in the information educational environment with the help of information and cognitive technologies, taking into account the cognitive patterns of text processing.

 $\ @$  2019 Published by Future Academy www.FutureAcademy.org.UK

Keywords: Infocognitive didactics, linguodidactics, axiological linguistics.



eISSN: 2357-1330

#### 1. Introduction

The anthropocentric approach in the pedagogy of the 21st century has predetermined the emphasis on subjectivity and individuality in the process of learning, in which objective knowledge becomes subjective in the mind of a developing person depending on his needs and motives. It corresponds with Edward Sapir's idea that language, being a great factor of personal socialisation, is at the same time 'the most powerful and the only known factor of personality development' (Sapir, 1993).

There are two distinct scientific trends we can see at the turn of the second decade of the 21st century that consider educational process as a process of transferring knowledge from one generation to another in a new, anthropocentric paradigm: on the one hand, it is pedagogical axiology, which explores the problem of developing a value-oriented consciousness among the young; on the other hand, it is infodidactics, which, using modern scientific data about cognitive processes typical of the so-called 'net generation' (Sapir, 1993), or 'gadget generation', deals with problems of new educational technologies necessary to be developed to fit the modern information society.

#### 2. Problem Statement

Modern education is characterized by emphasis on the axiological problems caused by the task of personality development. Linguodidactics has not fully embraced the ideas of the infocognitive and axiological approaches.

#### 3. Research Questions

The question to be studied deals with the concept of infocognitive didactics as applied to solving axiological problems of teaching the native language with the help of modern infocognitive technologies.

#### 4. Purpose of the Study

To consider the axiological and infocognitive approaches in the framework of linguistics and linguodidactics, to determine the prospects of integrating these approaches in the process of teaching the native language, to identify the conditions for the effective use of new educational technologies, to trace the features of their implementation.

#### 5. Research Methods

The methods used in this research include content analysis of theses, monographs, educational publications; semantical, corpus and cognitive analysis of language means, thorough analysis of research works in the field of Russian language teaching, pedagogical observation, and ranking.

#### 6. Findings

Modern education, and language education as well, is based on psychological and cognitive peculiarities of modern schoolchildren and students, of whom it is typical to have the so-called 'clip thinking'. The 'digital natives' Prensky, (2001), or, as we call them, the 'gadget generation', are characterised by a whole number of personal, psychological, cognitive and social features and qualities, among which one can single out a capacity for multitasking, a preference for visual information, a tendency for independence and emotional interpersonal contact. These features of modern youth determine the urgency to develop new educational technologies providing successful enculturation and socialisation of the individual. Currently, in the age of information, we will speak primarily about infocognitive technologies.

By 'infodidactics' we mean the organisation of teaching in the information-educational environment with the help of infocognitive technologies taking into account the 'gadget generation's' cognitive patterns discovered in processing textual information (Arkhipova & Shcherbin, 2015). The term of infocognitive didactics (infodidactics) has appeared in scientific literature quite recently [Karpenko, 2009] and has not been defined clearly yet, so let us specify the most significant, from the linguomethodological point of view, features of the notion.

Firstly, in modern information society one should be able to react quickly to the ever changing idea about the world and acquire new knowledge independently by means of up-to-date information technologies, such as the Internet in the first place. In order to form infocognitive competence, it is important for learners to be capable of information processing of the text, moreover, which is significant, it is recommended they apply a discourse analysis to it and treat it as a social speech-action (Arkhipova, Dziubko, & Sofronova, 2016).

Secondly, teaching language in terms of infodidactics presupposes developing skills of using text databases, which allow access to scientific and artistic texts, dictionaries and thesauri, encyclopaedias, as well as the ability to analyse and generalise the received information producing secondary texts.

Thirdly, communicative-cognitive competence of the contemporary person is developed under the influence of virtual content as well. Besides, it is generally recognised that information socialisation of a person has become more intensive (Dobrotina & Erokhina, 2017), thus it is important for learners to develop a critical approach to the content found on the Internet and form axiological requirements to the information they work with. The axiological part of infocognitive didactics is just as important as the semantic (informational) one.

In turn, axiological linguomethodology is a response to the challenges of time and realisation of the value approach to teaching language, and its innovative part consists, first of all, in addressing the problems of forming youth's value orientation, building their language and value consciousness by means of native language in an information-educational environment (Arkhipova, 2018a; Arkhipova, 2018b). Also, within the framework of axiodidactics, language researchers have recently been showing a lot of interest in regional linguistics, in regionalisms and dialectisms (Arkhipova & Lavrentiev, 2018; Ilyukina, 2014).

The current sociocultural situation in society has set before school education an urgent task of shaping the 'gadget generation's value attitude to the world, the society, the people around, nature, language, that is, the problem of personal value consciousness development in the process of teaching. The school of axiological linguomethodology, as part of specific teaching methodologies, is based on the sociocultural principle of teaching language, according to which language education is not only aimed at

building language, linguistic and communicative competence, but also helps an individual embrace the nation's cultural values and integrate into the community (Arkhipova, 2017).

The Internet information environment exerts a considerable influence over modern youth's socialisation. Psychologists have discovered a connection between teenagers' cognitive types of processing information and their moral formation and individual socialisation: 'Information socialisation is becoming one of the main institutions of adolescent socialisation' (Molchanov, Almazova, Poskrebysheva, & Kirsanov, 2018). For example, it has been revealed that in the conditions of information community teenagers' personal value self-determination becomes more difficult and is complicated by the uncontrolled influence of the Internet, as well as their unequal ability to critically assess the received information. At the same time, it has been proved that the higher capability of cognitive information processing a teenager has, the higher are his or her moral consciousness and readiness to take responsibility for breaking moral standards when analysing actions with a moral dilemma (Molchanov et al., 2018).

Infocognitive technologies are based, first of all, on specific cognitive methods of information processing used by modern youth, whose imagination prevails over logical thinking. This factor should be taken into account when developing contemporary models of language teaching.

Language- and value consciousness are formed mainly through language, through text as a linguistic, linguocultural, axiological, infodidactic notion (Aleksandrova, Aristova, Dobrotina, Gosteva, & Vasilevykh, 2017). Hence the conclusion that this phenomenon should be used for developing competences and skills of cognitive processing of text information at the lessons of Russian while analysing axiological texts with moral and ethical issues, including texts on the Internet. Thus, the actual methodological task of modern language education is to build and maintain the developing potential of info- and axiosphere (semiosphere in a broader sense) in pedagogical discourse, which can be based on specially created linguomethodological blogs or websites containing selected topical texts for value analysis in the process of speech development at the lessons of Russian, for finding out the pupils' and students' position on the message of these Internet texts, for writing creative works, such as essays. It is especially important to create and use Internet resources specially selected and compiled as author blogs, to organise social network communities with axiological interests. The analysis of these resources can be done in the form of written contemplation or commentary on a set of existential questions prepared by the teacher.

The axiological potential of Russian language lessons can be successfully realised in the application of the gradual system of exercises (Dziubko, 2006; Lagunova, 2016; Sofronova, 2006) aimed at developing the learners' moral values (from receptive tasks to reproductive and productive ones) — with strictly selected means, methods, forms, techniques of the same kind intended for different stages of learning, 'with a gradual increase in knowledge being transferred, the sophistication of the content, methods and forms of its presentation depending on the learning stage and the leaners' level of speech development' (Arkhipova, 2018b). It is reasonable that this work should be done in schools when studying such themes of the Russian language course as: 'The synonymy of different language units', 'Intratextual means of coherence', 'Figurative and expressive possibilities of language', 'Types of linguistic dictionaries', 'Text as a product of speech activity', 'Text information processing', 'The

stylistic colouring of the word', 'The evaluation of one's own and another person's speech', 'Phrase and its types', etc.

Mastering the native Russian language is the crucial condition for developing cognitive brain structures, which provide a person's active cognition of the world in relation to its values. That is why it is important today that methodologists and scholars of linguodidactics focus efforts on scientific investigation and problem-solving providing info- and axiospheres of language education and the modern generation's speech development, which would meet the challenges of contemporary semiotics, cognitivistics and axiology.

#### 7. Conclusion

Modern society, which is called cognitive, needs a new, infocognitive didactics, contributing to the value orientation of the individual in the dynamic flow of information. By infodidactics we understand the organization of value-oriented language learning in the information educational environment with the help of information and cognitive technologies, taking into account the cognitive patterns of text processing.

#### References

- Aleksandrova, O. M., Aristova, M. A., Dobrotina, I. N., Gosteva, Y. N., & Vasilevykh, I. P. (2017). Language and literary literacy as components of learner's functional literacy. In *The European Proceedings of Social & Behavioural Sciences (EpSBS)*, 43-51.
- Arkhipova, E.V. (2018a). Axiological linguomethodology in educational paradigm of the 21st century. *Science and Culture*, 55-58. Samara: SamGUPS.
- Arkhipova, E. V. (2018b). Axiological linguomethodology: Education by means of native Russian language (to the 175th birth anniversary of Mikhail Dmitriyevich Skobelev). *Psychological pedagogical research*, *3*, (47), 64-70.
- Arkhipova, E. V., Dziubko, G. Yu., & Sofronova, N. V. (2016). The realisation of the discourse approach to teaching humanities in universities (in the aspect of modelling). *Psychological-pedagogical research*, 4 (40), 90-96.
- Arkhipova, E. V., & Lavrentiev, V. A. (2018). Academician N.M. Shansky and the Land of Ryazan (linguistic and linguodidactic aspects of the establishment of scientific schools). *Psychological-pedagogical research*, 2, 136-141.
- Arkhipova, E. V. (2017). The basics of learners' speech development methodology: textbook and workbook for higher education institutions. /Arkhipova, E.V. (2nd.ed., rev.). Moscow, Yurayt.
- Arkhipova, E. V., & Shcherbin, V. K. (2015). Infocognitive technologies in contemporary philological education (infocognitive didactics). Proc. 7th Int. Linguistic Congress 'Language and The World' (Yalta, 5-8 Oct. 2015): Sci.Rep.Coll. in A.N. Rudyakov, Yu.V. Dorofeev (Eds.), pp. 20-24, KRIPPO (Crimean Republican Institute of Post-Diploma Pedagogical Education) Simferopol': 'Forma' Ltd.
- Dobrotina, I. N., & Erokhina, E. L. (2017). Students information culture development in the process of cognitive activity. In *The European Proceedings of Social & Behavioural Sciences (EpSBS)*, 243-249.
- Dzyubko, G. Yu. (2006). The development of learners' figurative speech in the process of studying comparison in Russian language lessons. (PhD dissertation (Pedagogy)). Ryazan.
- Ilyukina, L. V. (2014). Dialect vocabulary as a means of character personality revelation (illustrated by Aleksander Solzhenitsyn's story 'Matryona's Place'). The heritage of A.I. Solzhenitsyn in the modern cultural space of Russia and abroad (to the writer's 95th birth anniversary). A materials

- collection of the International scientific-practical conference, pp. 263-268. In A.A. Reshetova (Exec.Ed.) Ryazan State University named for S. Yesenin. [in Rus.]
- Karpenko, M. P. (2009). Cognomics. M.P. Karpenko. Moscow, Contemporary Humanities University Publ., (p.224). [in Rus.]
- Lagunova, L.V. (2016). Teaching periphrasis skills as a means of learners' communicative competence development. (Unpublished doctoral thesis (Pedagogy)), Ryazan.
- Molchanov, S. V., Almazova, O. V., Poskrebysheva, N. N., & Kirsanov, K. A. (2018). Cognitive methods of Internet social information processing and teenagers' moral consciousness characteristics. *Psychological science and education*, 23(5), 77-86.
- Sapir, E. (1993). Language. Sapir, E. Selected works on linguistics and culturology. Moscow: Progress.
- Sofronova, N. V. (2006). The ethno-cultural component of teaching Russian in the Orthodox elementary school. (Unpublished doctoral thesis (Pedagogy)). Ryazan, (p.208). [in Rus.]
- Prensky, M. (2001). «Digital Natives, Digital Immigrants». On the Horizon (NCB University Press, Vol. 9, No. 5, October 2001). Retrieved from https://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf