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Critical Thinking Skills in Information-Oriented Society

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Abstract— Nowadays a man exists under the continuous impact of information flows, in which it can sometimes be difficult to navigate. The development of communication technologies has contributed to a large amount of sources both true and fraudulent, so-called "fake" information, intentionally misleading its readers. In this environment, the importance of critical thinking increases, what allows to evaluate information in terms of its reliability, significance and value. The paper studies the issue of critical thinking formation both personal and professionally significant skill, which a man of today should possess. The ability to critically comprehend information is especially important for those who deal with texts of different levels and content in their activities. The indicator of their professional competence is how they can identify implicit and explicit meanings and layers of information embedded in the text. Skills of reading and understanding the text demand applied training, which is aimed at the critical thinking formation, therefore the authors suggest some ways of its development by interpreting texts.

Keywords— critical thinking, professional and significant personal qualities, interpretation, information, methods and techniques.

1. Introduction

The changed public paradigm associated with increasing the importance of information makes new demands including the training of professionals. Last decades the concept of an information-oriented society is actively developing, in which human activity is largely determined by his ability to effectively use the available information.

Many researchers such as J. Masuda [1], A. Toffler [2], M. Porat [3], D. Bell [4] and others developing this concept noted that the information-oriented society is based not on physical output but the knowledge and information creation. The scientists emphasized that information is able to increase, improve and unlike other types of resources is limitless.

In the information-oriented society more and more specialists are engaged in the production, processing and dissemination of information, what requires not only new skills and new knowledge but also a special type of thinking. A man of today should be able to evaluate the received information, determine its trustworthiness, reliability, usefulness etc.

Relevance of this research is due to the need to seek ways to train new-breed professionals. They must meet the requirements of modern society, that is, they are able to be

oriented in the information field and are able to find and select the most relevant and update information, analyze, interpret and process it for later use in scientific, practical, applied and other types of their activities.

The priority task of modern higher education is the training of highly qualified professionals who possess not only their professional competencies but also who has critical thinking skills. All this allows to significantly expanding the learning and in the future professional opportunities, as far as the collection of traditional knowledge and skills is supplemented by the ability to analyze, reason, and find the best ways out of the problem situations.

In this study **a solution** is proposed for the critical thinking developing necessary for the ability to work with information. The authors relying on their own teaching experience represent one of the efficient methods of students' critical thinking formation through the interpretation of various types of texts.

2. THEORETICAL ASPECTS OF CRITICAL THINKING

R.U. Paul defines critical thinking as the ability to analyze information from the standpoint of logic and the personal psychological approach in order to apply the results to both standard and non-standard situations and issues. Critical thinking is the ability to raise new questions, develop diverse arguments and sound decision-making [5].

Diane Halpern, modern educator and psychologist views critical thinking as using cognitive techniques and strategies that increase the likelihood of obtaining the desired end result [6].

J.A Braus and D. Wood speak of critical thinking as "rational, reflexive" thinking which allows not only to objectively reason but also to act in accordance with common sense. Critical thinking opens the possibility to look at things from different points of view, avoiding subjectivity and bias [7].

John Dewey proposes any conviction to verify, justify by arguments. Calling such a process "reflective thought", he distinguishes its educational value and proposes as an obligatory component the activity of a thinking subject [8].

The authors of critical thinking development techniques through reading and writing Ch. Temple, K. Meredith and J. Still [9, 10] in their work rely on a number of theories, the synthesis of which allowed to develop the most efficient methods. So they use the concept of L.S. Vygotsky [11] and J.



Piaget [12], who see the development of the personality possible only with the active construction of knowledge by the subject. They also turn to the theory of schemes by R. Anderson [13], according to which "in the process of cognition a person alters and modifies his ideas and his schemes." These researchers speak about the importance of the reader's reciprocal criticism, what according to the papers of L. Rosenblatt [14] and D. Bleich [15] is the need to express and argue his opinion.

Numerous modern researchers, who study the issue of critical thinking, develop and improve the mechanisms of its formation (I.V. Mushtavinskaya, S.I. Zair-Bek, .IO. Zagashev [16], E.S Polat [17] and others) relate to the works of C. Temple, K. Meredith and J. Still.

The authors of this paper considering critical thinking both as a personal and professionally significant quality suggest ways of its formation not only through reading and writing but also through the interpretation of various types of texts.

3. INTERPRETATION AS A METHOD FOR CRITICAL THINKING FORMATION

Teaching techniques of text interpretation is designed to create professionally significant skills and a culture of reading in general.

In the process of reading a text the reader comprehends the meaning laid down by the author i.e he finds the common ground between his and the author's world-image. The primary skills of interpreting texts, from our point of view, need to be formed analyzing literary texts; later they can be successfully used to work with different types of texts.

Interpretation (from Latin interpretatio - mediation) is an explanation, elucidation, disclosure of the text meaning, its perception as a single whole, possessing the integrity, proportionality and interrelation of all its parts [18].

Understanding of any literary or non-literary work is conditioned by the reader's experience, his world view, level of education, outlook and personal interests. V.V. Vasilieva says that for each reader there is only his known, only to him given and it is his question that arises [19]. That is, the depth and quality of the interpretation depends on the life experience and knowledge of the reader.

M.M. Bakhtin notes that "the understanding of the text includes individual acts or levels, each of which fulfills its function: the perception of the text; recognition of the text and understanding of its general meaning in a given language; understanding of its meaning in the context of this culture; active dialogic understanding of its meaning, coinciding with its formation" [20].

K.J. Holyoak distinguishes several stages in the work on the text interpretation. First, visuality of the text content based on its literal meaning; secondly, the identification of hidden meanings of the exposition through the finding certain "hints" in the text. Then reader builds preliminary pictures that reflect the key points of the text (what the author of the text wanted to say first of all); and finally, relationships are established between the supporting key moments and private goals of the text that lead to representations of the general architectonics of the text with a general concept and characteristic of this design attainability. [21]

M. Hoey is convinced that the writer from the title of the text and the first sentence initiates an interpretation. The reader is formed expectations about the subsequent information, which can be presented in the form of questions, the answers to which he finds in the following passages. According to M. Hoey, the actions of the interpreter are connected with filling the missing not only and not so much in the read text as in the obtained sequence of expectations [22].

Thus, for understanding information in general and literary text in particular, appropriate critical thinking skills are needed. It should be understood that any text has a number of categories among which I.R. Galperin distinguishes the following ones: informative value, divisibility, cohesion (intertextual links), continuum, auto-semantics of text segments, modality, retrospection and prospection, integration and completeness of the text [23]. These categories allow us to understand the text at the level of its structural arrangement and semantic content.

4. TEACHING TECHNIQUES OF TEXT INTERPRETATION.

The development of critical thinking intervenes consistently, in three stages - challenge, insight and reflection. While teaching the text interpretation at classes we propose to rely on a similar scheme.

So at the stage of the challenge, it is supposed to set the final goal and tune the students to achieve it. Students get acquainted with the biography of the writer and with the history of the work creation. Also at this stage the students express their thoughts about the possible content of the text, referring to the headline and the epigraph (if any) and indicate problems. The teacher can offer key words that will help students in making assumptions.

The second stage involves working with the text itself, understanding new information. It is important to teach students to analyze the plot lines, images of the characters, the motives of their actions. Images of heroes are made up of their portrait, speech behavior and interaction with other characters as well as from individual details that allow us to reveal the features of the characters' inner world.

One way to analyze a text is reading with stops. This method allows you to work through the material in detail, critically comprehend received information, form and find arguments for the proof of your own point of view or author's position. In preparing for the analysis, you can also use the clusters techniques, which allows you to graphically organize information, highlighting the main semantic units and the relationship between them. Another way to work with text is a two-part diary. It consists of two parts in which the fragments of the book and the reader's personal experiences and emotions are fixed. Especially this technique is effective when it is necessary to examine in detail a large text.

Students analyze the text itself at the third stage of reflection when they have a holistic view of the book read. This technique we called a puzzle when the components connecting with each other make it possible to interpret the



whole text in general. At the stage of reflection students give reasoned answers to the questions they raised at the previous stage.

Interpretation of a literary work is an idiosyncratic interaction which can be denoted as "author-reader". The reader places his own thoughts of life and its values on the text he read which makes possible the existence of different interpretations of the same text.

5. CONCLUSION

Definitely there are different approaches to the formation of critical thinking. Within this article only one of many ways is presented which allows training students for a critical interpretation of information. The example of the texts interpretation shows how to teach thoughtfully, sequentially delve into the content of the text read, not limited to shallow and emotional perception. The ability to interpret allows to disclose the author's intention and to unravel those goals that are not always obvious.

The primary skills of critical thinking formed during the interpretation of literary works students can further transfer to other types of texts such as scientific, journalistic etc., which makes it possible to differentiate proven beliefs and unfounded guesses or opinions.

Thus, in the conditions of information oversaturation critical thinking becomes especially significant as far as it offers opportunities for self-fulfilment in professional, social and other types of activities.

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