

## PSYCHOLOGICAL-PEDAGOGICAL CRITERIA FOR NEW GENERATION TEXTBOOKS

### Abstract

The article dwells on the main psychological and pedagogical criteria which should lay the foundation for all the reforms in school textbooks of transformational societies in transition period. After having analyzed the criteria and aims of textbooks a manual is presented which, as the author suggests, may be valuable in directing high school students in their choice of careers.

*Keywords:* transformational societies, transition period, main purpose of education development, functions of a textbook, criteria of textbook evaluation, the overall psychological atlas.

The education system becomes especially vulnerable within transformational societies as it fails to meet its main mission in the maelstrom of changes (Dzhurinski, 1999; Yasvin, 2004).

The project on “The State Education Development Programme” of RA 2016-2025” states that the main aim of education development is to provide every citizen, at any stage of his/her life, with qualified education in compliance with his/her requirements, mental abilities and objectives; to meet the economic and public challenges, to serve the national interests. In the maelstrom of tasks to achieve the main goal of education development, the qualitative improvement of educational resources, such as the creation of textbooks, their correspondence to subject-based curriculum and criteria, is of the primary importance.

As has been aptly stated, a good textbook is worth schooling. It allows a child to be well educated, brought up, socialized adds up to

the acquisition of social behavioral standards, language skills, civic and moral codes (Poghosyan, 1996; Imangozhina, 2015).

As an intermediary between “live learning” and other means of knowledge acquisition, a textbook acts on part of a range of functions that are closely considered in the process of evaluating the effectiveness of a textbook. The suggested questions for such evaluation should be designed as follows: does the textbook reflect the outlined pedagogical functions; to what extent does it reflect? What characteristics of a textbook resolve most of the issues under question?

The answers to these questions enable to speak about the textbook effectiveness, the latter being the fundamental purpose of the didactic evaluation process. The main criterion for the efficiency of the textbook is the effectiveness level of application of core functions. What are these functions and what textbook characteristics conduce their implementation?

Pedagogical and psychological sources (Pogosyan, 2005; Imangozhina, 2015; Monakhov, 1997; “The issues on school textbook. XX century. Reviews,” 1996) most often single out the following functions of a textbook: informational, transformational, research, self-educational, coordinating, and self-control - research and self-educational functions being of high interest, the preferable development of which coincides with the overall tendencies of modern didactics. Along with the abovementioned functions, the motivational and training functions are also strongly advised.

The overall application of informational function is to convey factual materials in textbooks. Unlike all other means, the provided information here is given in a logical, subject-based and psychological manner defined by the state educational standards.

The transformational function does not only orient a student in the cognition of the reality but also in its alterations. This function closely relates to the training function, the latter aimed at developing practical abilities and skills among students and at the same time closely connected with the research function the latter being introduced either in the form of description of methods and directions, or in the form of assignments and questions for a student’s autonomous activity. The research function presupposes the implementation of research-related activities that are easily handled by students as a result of which students acquire basic methodological knowledge of each subject.

The self-educational function is aimed at creating the conditions for students to independently use different sources of information. Thus, textbooks should promote new

sources of information, a positive attitude to learning. Such an approach can be achieved through an attractive delivery of materials which, in their turn, would lead to the acquisition of skills for mental work.

The motivational function is responsible for emotional and inspiring background of students which is, in the first run, should be implemented via a positive attitude to the subject matter.

The following observation is to illustrate the importance of the given function. History teachers in schools typically focus on the development of verbal-logical skills embracing one side of the mental activity, thus very often neglecting not less important imaginary component. Thus the study of history through verbal means becomes formality with no illustrations behind the facts. Historical concepts and laws of social evolution which lack adequate and clear images do not communicate lively and precise contents to students, while the latter with imaginary background find it difficult to comprehend the historical notions and definitions. As a result, the delivered material is explicit and comprehensive for only one group of students, while the other part should struggle to understand it.

In our view, the perception and cognition of historical material should be based on emotional experiences which, in its turn, may contribute to the formation of students’ personal attitudes. The emotional background of a person is known to play an essential role in one’s life; thus, the outlines of history lessons should take an emotional moment, a unique psychological phenomenon, into account. This task could be achieved through the representations of historical figures with their true personality traits, positive and negative

sides of character, the true reasons for their achievements and failures. Any state policy is aimed at emphasizing the most glorious events of their historical timeline in history books consciously leaving out the defeats and failures. This is not surprising since textbooks are called to nurture the spirit of patriotism among students. However, we strongly believe that such an approach, is deficient by nature and the concealment of true reasons for historical failures may lead to biased interpretations of historical events and false perceptions about uniqueness of one's nation. Last but not least, the fair interpretation and analysis of unsuccessful pages of history may be more educational and beneficial than those of success and glory.

The remaining functions are linked to the coordinating function. The textbook should provide the development of an attitude to knowledge system as a means of source of self-education. Broadly speaking, the control of knowledge system presupposes the formation of the developing system of self-control and self-estimation, mutual control and mutual estimation.

Would it be expected for one textbook to meet all the functions and be evaluated from that perspective? The answer is not definite considering a big variety of textbooks. According to Okoni's classification, the books fall into the following categories: universal, systematized, practice and curriculum-based textbooks each having their unique characteristics. While a universal textbook is the only example of the combination of all functions, the others are not necessarily to include all the functions. Thus, the textbook may only exemplify informational and research functions or a group of other functions depending on a

particular school's requirements and an author's conceptions related to those requirements.

Apart from being methodically approved in classroom, the application of textbook functions largely depends on other factors such as theoretical, methodical, linguistic, economic and publishing.

Theory and practice are largely the main groups to rely on when investigating textbook effectiveness. These two are closely interrelated; however, while theory can only be evaluated from a certain range of characteristics, the assessment of textbook effectiveness is fully found in its practical usage in schools.

As has been earlier mentioned the core functions are underlying in the didactic criteria of textbook evaluation. The question is whether a textbook contains all the characteristics required to meet the mentioned functions. This concept needs to be thoroughly analyzed and the primary question to answer is to identify the characteristics of a textbook which are linked to the implementation of some functions.

To illustrate this, a number of characteristics needed for a textbook to implement the informational functions are given below:

#### 1. Textbook content

- Alignment with the content of modern scientific knowledge
- Classification in subject-based, logical and psychological outline (as required by a subject structure)
- Conformity with the curriculum aims of the curriculum guide
- Consolidation of names and accuracy of terms
- Conformity with terms and names in textbooks of interdisciplinary subjects

- Variety of information delivery (a word, picture, photo, graphics, etc.)

## 2. Structure of textbook

- A clear organization of structure; identicalness of units (for example, texts, exercises, tests, summaries, etc.)
- Implementation of core principles of mental models in the structure of textbooks (Contents at the beginning of textbooks; inclusion of subject-related terms, appendices, etc.)

## 3. Methodical design of content

- Conformity with modern didactic requirements in the field of language (comprehensibility, accurate structure, flexibility)
- Conformity with the methodical requirements of the subject matter
- Variety of examples reflecting an author's conceptions
- Inclusion of studied references and students' experiences
- Variety of core assignments and tasks
- Separation of educational materials according to levels of complexity
- Management of speculative skills in problem-solving activities

## 4. Design and publishing

- Ease use of a textbook
- Objectivity, esthetics and awareness in the choice of a layout (a durable, hygienic; attractive binding that reflects the content of a textbook)
- Paper standards (a high-quality paper with an appropriate color and shade)
- A wide range of illustrations (pictures, photos, drawings, graphics)
- Inclusion of knowledge-based illustrations appropriate to the content and

user level

- Accuracy and briefness of inscriptions to illustrations, their appropriateness in style and form to functions and nature
- Appropriate accentuation (for example, main notions, provisions, etc.)
- Consistency of margins with the inclusion of core notions and images
- Appropriate volume of reading
- Accurate emphasis of an author's name and last name, as well as that of an illustrator, reviewer and editor.

A similar list of criteria can be drawn for all forms of functions. However, as has been mentioned earlier, the effectiveness of a textbook can only be evaluated in comparison of theory with its practical application in schools.

After analyzing the abovementioned functions and criteria an attempt was made to come up with a manual that could, as we may envision, also be applicable for counseling high school students in their choice of careers. Entitled as *Designed in a demonstrative-figurative style* "The overall psychological atlas" (Pogosyan & Pogosyan, 2012) is unique in its methodical approach which allows to facilitate students' studies of the "General Psychology" subject. The simple and easily comprehensible graphs of the manual illustrate a full picture of core psychological principles, main concepts and methods; the main psychic processes, descriptions of states as well as psychological personality traits. The manual enables to apply modern approaches to the processes of delivery, teaching and revision, testing and control. Considering the shortcomings of graphs given alone, each topic is accompanied with an in-

troductory text. The manual “The overall psychological atlas” has been in use for almost three years and thus has proven to be practically effective. To control and self-control the knowledge of psychology “An overall psychological questionnaire” is suggested (Poghosyan & Poghosyan, 2012). It consists of two parts, the first designed by the authors themselves, the second referring to the well-established research materials in the field of psychology, which have been re-published for several times and the authors of which are rightly the most outstanding in the field.

The article has related to the main psychological and pedagogical requirements for changes of textbooks to be considered for transformational societies in a transition period. The other requirements for educational means will be discussed in upcoming publications.

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