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ANALYSIS OF THE CURRICULA AND TEXTBOOKS FOR I AND IV GRADE IN PRIMARY EDUCATION

Abstract: Textbooks occupy a central place in the educational process and they are one of the dominant means for the realization of the curriculum. For these reasons, it is more than necessary to raise the standards for their development, because the existing evaluation methodology does not meet the basic and modern criteria for their evaluation. Namely, the textbooks cannot be evaluated with an universal methodology, due to the fact that each subject and adult year has its own specifics. The teaching and scientific contents in the textbooks need to be didactically classified. Viewed from several aspects, we can come to an established view that: the quality of education depends on the quality of textbooks.

The educational system in our country is subject to changes that occur in educational policy. In accordance with the new Concept for primary education (2021), new curricula and textbooks for I and IV grade have been prepared for the realization of teaching. From here, the purpose of this paper is to analyze the curricula and modern trends for the preparation of a textbook. We will see how all the components for the textbooks are represented to be modern, whether they encourage analytical and critical thinking, whether the adoption of new concepts is systematic and whether the students are trained for practical use of the acquired knowledge.

Keywords: Modern textbook, Curriculum, Textbook evaluation

Introduction

The prehistory of the textbook begins with the appearance of the letter, and the use of the first textbook is considered to begin with the appearance of the first school. The textbook activity in our country begins in the middle of the XIX century, with the appearance of the Enlightenment

and the first books in Macedonian language. In pedagogical circles and literature, the textbook until the XIX century, is considered traditional and classical. The concept of making and structure of the textbooks was systematized according to the requirements of the “old school” – reproduction of the curricula and impressive presentation of the teaching contents by the teacher. At the beginning of the XX century, the “new school” movement emerged as a radical reaction to the “old school”. The requirements set by the “new school” are targeted at the modern textbook, which aims to enable the student through constant activity and involvement in the teaching process for: fulfillment of functional and problem tasks, independent work and motivation to search for new sources of knowledge. Due to the rapid development of educational technology and the enormous expansion of new knowledge and information, the demand for means and sources for acquiring and transferring knowledge is increasing by itself.

The modern textbook has lost the old monopoly position of the traditional textbook, because it is no longer the only and authoritative source for acquiring knowledge. Most often today the textbook is used in combination with other means of communication, so that its goals and tasks become more complex. However, it does not lose his dominant role, because he is the main coordinator of all teaching aids used for quality implementation of the educational process.

Defining the Problem and Basic Concepts

In the pedagogical literature there are several attempts to define the term textbook. The difficulties in defining it arise from the diversity and complexity of its role, function, structure and physiognomy. Therefore, when defining a textbook, it is best to start from its global function in teaching, while taking into account other factors (teaching content, student, teacher). (Стојановска, 2012, 40)

The textbook is a source of knowledge and a teaching tool that is used to achieve the set educational goals. The textbook enables students to achieve the standards of knowledge and to encourage the development of skills in: **cognitive area** (development, analysis, synthesis of knowledge), **affective area** (acceptance of values and formation of one’s own attitude) and **psychomotor area** (encouragement to acquire manipulative skills and independent evaluation of practical work). (Концепција за изработка на учебник и методологија за вреднување на учебник, 2010, 13)

According to the requirements of the so-called modern school and teaching, the focus of learning is not only on the accumulation of knowledge, but also on mastering, developing and advancing knowledge. Due to the flow of a large amount of information, students need from an early age to adjust to distinguish: unimportant from essential and relevant from irrelevant. This task is shared between the teaching process and the textbook, as its integral part. This task is shared between the teaching process and the textbook, as its integral part. The writing, application and evaluation of a textbook is characterized by a number of specifics, which depend on a number of factors and aspects of consideration (pedagogical, methodological, psychological). The textbook is always a current issue, depending on the degree of dynamics of modern educational processes and its adaptability to monitor their pace. The task of the textbooks is to implement the curriculum practically and to verify its separate concepts.

The curriculum is usually defined as a system of contents, divided into subjects, according to the teaching plan. In this regard, we can say that the textbook is located between the program, students and all other factors that participate and make up the educational process. Therefore, it is necessary for the textbook to have a modern, dimensioned and multimedia character, but also to be structured in accordance with the set conditions for the realization of the curricula. From here, we come to one of the functions of the textbook, which we will focus on in this paper, and that is: **connection and adaptation of textbooks for certain subjects for I and IV grade in primary education, according to the curriculum.**

Physiognomy and Structure of Textbooks

The physiognomy and the structure of the textbooks need to be in accordance with the laws of the educational process, because the structure of the textbooks reflects the structure of the teaching process. Textbooks should be didactically-methodically shaped, because their content depends on a number of criteria, such as: curriculum requirements, opportunities and abilities of students according to their age, receptive power, ability to stimulate motivation and activity in the learning process.

The structure of the textbooks is a whole that is composed of independent parts/ elements, which need to be interconnected and harmonized. The global structure of textbooks differs from other information tools used for learning, because each element of the textbooks that has the task of conveying information, has its own special structure and logical connection (Петроски, 1994, 24). According to the function of the textbook, the structural elements can be divided into three groups: presenting the content, adopting the content and more efficient learning and orientation when working with the textbook. (Требјешанин, Лазаревиќ, 2001)

The didactic structure of the textbooks is composed of two components: **textual part and extratextual part, so-called didactic apparatus.** (Маказлиева, 1995, 36)

Text Component

The textual component is the main, most extensive and essential part of the textbook. It contains the basic information that students must adopt. The core of these texts is based on knowledge of basic concepts, laws and theories. This component is a combination of three individual text structures: **basic, supplementary, and explanatory** (Маказлиева, 1995, 36-37). **The basic texts** are in the composition of the main paragraphs in the textbooks, which are divided into smaller parts, for easier mastering. They contain: main terms, definitions, facts, generalizations, knowledge, principles, rules for application of knowledge, descriptions, logical operations and systematization, integration of teaching material, etc. Additional and explanatory texts serve as auxiliary or “bonus” text, with information to clarify and form a complete picture of the content being studied. According to this structure of the texts, the students are enabled to systematically and consequently adopt and apply the new terms.

Extratextual Component (Didactic Apparatus)

By extratextual component, we mean everything that does not belong to the textual component, ie everything that is not a basic text, and yet is in function for its better adoption. **Illustrative materials** have a special place in textbooks. The illustrations in the textbooks are in color, which provides visibility of all the essential features of the objects that are illustrated. Depending on the age for which the textbook is intended, the nature of the subject and the content of the text, the following are used: pictures, drawings, illustrations from various scientific disciplines and areas, schemes, tables, graphs, etc. The purpose of the illustrations is to raise the interest of the students for the content that is studied, and thus to contribute to greater impossibility and permanence of the knowledge. Through the pages of the textbooks for grade I it is noticed that the illustrations are more present (0.75: 0.25) than the written texts, while the number of illustrations in the textbooks for grade IV is significantly smaller. In order for students to be able to quickly and easily navigate through the pages of textbooks, the so-called **orientation apparatus**, which consists of: content, introduction, titles and subheadings, graphic symbols, page numbering and overview (reminder) of terms. (Маказлиева, 1995, 38)

To get a complete picture of the structure of textbooks, it is necessary to emphasize the representation and role of questions, tasks and exercises (didactic components of the textbook). They are in function of complete and productive processing of the material that has been studied, and

the students learn how to learn and how to discover the essence of what they are learning. We can divide them into two groups: one is intended for introducing students to new content, and the other for developing, checking, determining the already acquired knowledge. When students are introduced to new content, they are in the form of instructions to encourage independent observation, research, thinking, connecting new knowledge with previously acquired knowledge and so on. The second group refers to the knowledge that the students have acquired and they are checked and determined. Knowledge is practiced by solving problem tasks or situations, they are determined and applied, which develops critical and analytical thinking. In this way, students are motivated to independently and interactively engage in the process of learning and reasoning, to develop the ability to explore, observe and fantasize – this will enable cognitive and emotional development.

Criteria for Making Textbooks

The criteria according to which the textbooks are made in our country are contained in the Concept for making a textbook and methodology for textbook evaluation. The Bureau for Development of Education (BDE) is responsible for this document, in accordance with the Law on the Bureau for Development of Education and the Law on Textbooks for Primary and Secondary Education. The aim is to assist the authors in writing the textbooks, as well as the review committees, in providing objective, professional and quality evaluation of the textbook manuscripts. In this way, unified criteria for textbook development and evaluation are set. The document is structurally divided into two parts:

- **Part I: Conceptual solutions for the development of textbooks** – all general conditions that a textbook needs to meet are defined, for proper application in teaching. The following are determined: scientific-professional and methodological bases, didactic-methodological standards in the selection and systematization of contents, developmental educational functions, visual attachments, language and language culture. This section also includes the basic criteria for preparing textbooks:

1. compliance of the content of the textbook with the curriculum;
2. adherence to modern achievements in a certain scientific field and use of professional terminology;
3. compliance of the textbook with the age of the students;
4. upbringing function, positive attitude towards science/knowledge, development of civic and national identity, multiculturalism and gender equality. (Концепција за изработка на учебник и методологија за вреднување на учебник, 2010, 8)

In addition, we will make a global analysis of the new textbooks, so that we will see how compatible they are with the above criteria. The critical observation will refer to the textbooks for I grade (Macedonian language, mathematics, natural sciences, society) and IV grade (Macedonian language, mathematics, natural sciences, history and society).

The first criterion that the textbooks must meet, refers to its **content compliance with the curriculum**. Based on the requirements of the new curricula, new textbooks were completely developed for all subjects taught in I and IV grade. These textbooks are in use from this school year (2021-2022). The contents that are processed in certain subjects are compatible with the learning outcomes, which are defined in the programs. Based on this, the contents are harmonized with the fund of teaching hours, topics (areas) and terms that are introduced in the curricula for the subjects. The textbooks adhere to the interactive method of work, so the contents that are processed in a given subject are correlated with the contents of other related subjects, which allows expanding the horizons for acquiring comprehensive, lasting knowledge and generalizations, as well as using a wider „palette“ of learning resources. For easier application of the interactive method in teaching and more active approach of the subjects in it, in the curricula are given examples of

activities that can be implemented by the teachers in the adoption of the teaching contents. According to the prescribed requirements of this criterion, we realize that the Concept for making a textbook is not harmonized with the new curricula, which put the learning outcomes at the center of their structure. The Concept, which has not changed since 2010, still emphasizes the achievement of the intended goals in teaching, according to the requirements of previous curricula.

The second criterion refers to the **adherence of the textbooks to the modern achievements in a certain scientific field and the use of professional terminology**. The textbooks have a modern, multimedia character and are up to date with the modern achievements in a certain scientific field. They contain visual attachments, additional texts, questions, tasks, which result in additional activities for the adoption of the content, its generalization, development of the method of cognition, logical operations, etc. In order for students to acquire quality knowledge, it is necessary to pay attention to the chronological course in the acquisition of knowledge at all levels of thinking – from memory and reproduction, understanding and comprehension, application of knowledge, to practicing and encouraging the more complex thought activities (analysis, synthesis, evaluation ...). The contents that are intended to be adopted within individual subjects, should be processed according to the principle from general to complex, so that students will be introduced first to the basic information, concepts and terms related to the specific content, and then move on to them. decomposing, deepening and forming a logical whole. This is especially a problem when it comes to processing more complex content at a higher thought level, which students encounter for the first time (especially first grade students). In order for students to acquire knowledge in the field of mathematics in a more interesting and easier way, in the mathematics textbooks for grades I and IV, an innovation has been introduced in the learning approach (research-discovery approach, interwoven with dynamic text), which is in order to achieve higher achievements and increase the functional mathematical literacy. In order to master some more complex contents, it is necessary to have a larger part in the textbooks for the adoption and recognition of knowledge. In this regard, a shortcoming is noticed in the textbook of mathematics for I grade, in the part where operations start, addition and subtraction with numbers up to 20 (transition from first to second ten).

The terms that the students are supposed to adopt in the individual subjects are expertly used in terminology, so that scientifically based, structured and validated knowledge and information are offered. This begs the question: – How close and familiar are the professional terms and contents to the students? The answer to this question will be given in the review of the following criterion – **compliance of textbooks with the age of students**. This criterion refers to the developmental characteristics of students in relation to the age for which the subject is intended, emphasizes the need to use an appropriate understandable and interesting style of language and illustrations. Students should gradually get acquainted with the meaning of the professional terms in a certain scientific field, intended for the adoption and mastering of the contents of certain subjects. Analyzing the vocabulary used in the history and society textbook for grade IV, we notice: vague and complex expressions, difficult concepts to understand – which make the processing of the content at a higher weight and thought level, such as: nepotism, corruption, empathy, ect. Students are required to understand and judge these terms. The questions intended for practicing the studied contents are very similar and indeterminate, which causes confusion among the students. This can result in aversion or abstraction in students' expression, as well as difficulties in mastering and understanding the material. Also in the part related to the content – the environment in which I live, the set tasks have excessive demands from students up to the age of ten, such as: students are required to do research on cultural and historical heritage, and then summarize the results and finally present them to the local community or the residents of the municipality (Ангеловска, Илиоска, 2021, 67) or students are asked to think about the problems faced by the citizens in our society, to make a proposal for their solution, with the help of the citizens of

the municipality and then to present the problems to the mayor and the employees in the municipality. (Ангеловска, Илиоска, 2021, 59)

As inappropriate content we can single out – electricity and magnetism, in the textbook for IV grade in natural sciences. According to the set learning outcomes in the curricula, students are required to acquire knowledge about the components, types of circuits, as well as their function.

In the Macedonian language textbook for grade IV, the focus is on logical and expressive reading. A wide selection of popular science, art and non-literary folk texts is offered. Many of the texts are quite extensive and long (above the level for which the textbook is intended), so that students face difficulties in reading, understanding and interpreting them. The reason why the texts are at a higher weight level is due to the negative results and comments received from the last PISA (2018) test, in the area – reading comprehension, where the achievements are significantly below the OECD average (Јамева, 2020). Students should acquire the habit of reading from a very early age, through continuous practice and gradual practice of various techniques. The aim is to increase concentration when reading long, comprehensive and abstract texts. This will further enable students to identify the main idea, draw conclusions, personal views, make comparisons and link texts to their informal knowledge.

It is necessary for modern textbooks to have an **upbringing function, a positive attitude towards science/knowledge, development of civic and national identity, multiculturalism and gender equality**. We see that this criterion is composed of several parts that intertwine with each other. The upbringing function and the positive attitude towards science, without exception, are present in all textbooks. The next part refers to the development of civic and national instinct, which must be nurtured from an early age. Students need to gain knowledge about their homeland, the roots of their people and important historical events. These contents are present in the textbooks in society and Macedonian language (I grade) and history and society and Macedonian language (IV grade). In the contents, questions, tasks and illustrations that are represented in the textbooks, different ethnic / cultural communities are noticed, so that the students are introduced in the intercultural education. The aim is for students to get acquainted with the culture and roots of their people and homeland, the history and tradition of different ethnic/cultural communities that we have in our country, to promote the specifics of each community and to present interaction and friendly relations between them. The last part of this criterion refers to gender equality. The textbooks avoid implicit and explicit emphasis on gender stereotypes and division of male and female roles and professions. Special attention is paid to the equal presence of male and female characters in illustrations and texts, as well as the use of names from different ethnic/cultural communities. In this way, gender equality and human rights are sensitized. The textbooks are published in Macedonian language in Cyrillic alphabet. For students who belong to other communities, the textbooks are published in the language and script in which they teach.

- Part II: Methodological dimension for textbook evaluation – this section includes a set of several instruments, which refer to the four basic criteria for preparing textbooks. Based on these instruments, indicators for textbook evaluation are clearly defined. This section is intended for review committees, based on their professional competencies. The same instruments are used for all subjects of primary and secondary education. (Концепција за изработка на учебник и методологија за вреднување на учебник, 2010, 104)

Conclusion

The curricula and textbooks used in certain subjects depend on the innovations and modifications that are introduced in the educational system. The Concept for making a textbook and methodology for evaluating a textbook has remained unchanged since 2010, and a new Concept for primary education (2021) was prepared, on which new curricula and textbooks were developed

and started to be applied, for I and IV grade. It is necessary to develop a new Concept for textbook development and methodology for textbook evaluation, in accordance with the new requirements of the curriculum. This will enable greater compatibility of textbooks with the set criteria for making in the Concept for making textbooks.

The methodology for evaluating textbooks is based on the basic criteria for preparing textbooks. According to the methodology currently used for evaluation, all textbooks for individual subjects are evaluated according to the same instruments and parameters, whether they are related or not, whether they refer to primary or secondary education. It is necessary to develop special instruments for groups of related subjects, according to the level of education (primary/secondary) and educational cycles, which will enable a more objective, professional and better evaluation of manuscripts for textbooks.

It is also necessary to pay more attention when creating curricula. In the new curricula, the central place is occupied by the setting of learning outcomes – what we expect students to achieve in specific subjects and grades. The curricula are based on the National Standards, based on competencies. By achieving learning outcomes, competencies are actually acquired: knowledge, skills and attitudes. It is necessary to balance the workload of the curricula with the expected learning outcomes, because they are set at a higher level than the real developmental abilities of some students.

From everything we have said so far, we realize that the structure of textbooks, whether they are modern or traditional textbooks, largely depends on the structure and requirements of the curriculum. Through the processing of the curricula, the scope of the curriculum and its depth are determined, which leads to the concretization of the requirements of the curricula. Due to this interdependence of textbooks and curricula, we ask the following question: – What does the students' workload depend on? The answer to this question can be seen from two sides: on the one hand it is considered that the curricula are overloaded, and on the other hand that the processing of the contents in the textbooks is at a higher level. As we have pointed out before, textbooks are compatible with the curriculum, so from this interdependence arises the dilemma of whether it is necessary to facilitate the curricula or the textbooks. In order to properly clarify this dilemma, we will refer to the structure of the textbooks, starting from the aspect that the volume of contents presented in the textbooks may be the same, but the workload of the textbooks may be different. From this point of view, we conclude that the workload of students is different, depending on the way of structuring the contents in the textbooks. Students up to the age of 10 are still thinking on a concrete level. Therefore, the language style that will be used for processing and mastering the contents in the textbooks should be understandable and interesting, and at the same time it should gradually encourage the development of abstract thinking and stimulation for concluding at a higher level of thought (from inductive to deductive).

When it comes to processing more complex content, they need to be supported by a number of appropriate examples, questions and tasks for practicing knowledge, so that clear instructions will be given for their fulfillment. This complex process indisputably depends on the way the teaching contents are processed and interpreted by the teacher. For that purpose, the curricula list proposed activities for the realization of the contents, which should reduce the burden of the contents in the textbooks, and also to facilitate the work of the teacher in the process of implementing the activities.

In relation to this current issue, there will always be conflicting opinions and views from various starting points, in accordance with the innovations that are introduced in the educational system. It is too early to draw any conclusions regarding the new curricula and textbooks. The outcome of these changes will be seen based on the achievements and results of the students in two years.

The most important thing is to emphasize and not to forget the basic purpose of the textbooks: **presentation of contemporary achievements in a certain scientific field in a simple, easily**

understood, interesting and literary language, which will help students to more easily accumulate new, lasting and applicable knowledge, skills and abilities.

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SOCIAL PROBLEMS OF STUDENTS WITH RARE DISEASES IN ELEMENTARY AND SECONDARY EDUCATION

Abstract: Rare diseases are complex, chronic, often degenerative and life-threatening diseases. They are characterized by a variety of diseases, symptoms that vary not only from disease to disease, but also in the disease itself.