



CONSTRUCTION FUNCTIONAL LITERACY THROUGH TECHNOLOGY EDUCATION

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Abstract: *In the present paper, characteristic on the technology education contents in preparation of generally education in tie with construction of functional literacy of the personality is made.*

The concept “functional literacy” can be examined as a general structure of different competencies or as a combination of different kinds of literacy which are constructive elements in the development of the personality in the field of technology education. It based on technology education, consists of: technical education, technological literacy, computer literacy, health literacy, ecological literacy, aesthetic literacy, communicative literacy, legal literacy, economic literacy.

For the determination functional literacy level, formed by the technology education in the pupils in preparation of generally education (K5 – K8) have realized empirical research. The attainments of pupils by criterion and indexes on knowledge, comprehension, application, analysis, synthesis and evaluation levels are mark. The results have liable to statistical correlation analyses.

Key word: *functional literacy, kinds of literacy, technology education and correlation factors of the functional literacy.*

INTRODUCTION

One of important problems for people is problem illiteracy. According to date UNESCO every fourth person on the planet is an illiteracy which requires making serious decisions about solving this problem. The importance of literacy arises from social conditions and requirements. The literacy ensures of each person and community the opportunity to learn local culture, accumulated over the centuries as a social experience with regional significance. According Z. Zhekov “The contemporary

science is only a part, a subsystem from a bigger system – society and its development, functions and tasks ate defined by the relationships with this greater social system” [34, p 6].

Today we live in a dynamic world and we are surrounded by various technologies that change daily. Operation of everyone in such an environment requires a solid knowledge. Rapid technological change and human encroachment into practice requires rapid adaptation of any society. Adaptation of the

individual to these dynamic technosphere is measured by the term “functional literacy”.

Functional literacy of individuals is a relatively new concept that has been gaining ground in educational science. This requires examination not only of the concept, but its place in the educational process. So this term is fundamental for the democratic society.

This research was prompted by the fact that over the past two decades, major efforts are underway worldwide for literacy of each individual. All educational systems of the world are focused on the quality of the educational process. It determines the competitiveness of the schools.

In one of the articles of the Treaty on European Union Community shall encourage higher quality of education, each Member State shall pay particular attention to the curriculum, the organization of the education system, cultural and linguistic diversity. This clause is a consequence of the fact that every fourth person on the planet is illiterate, according to UNESCO, which requires serious decisions about overcoming this problem. The importance of literacy is driven by social conditions and requirements. It provides individual and cultural community the opportunity to learn the local culture, accumulated over the centuries as a social experience with regional significance. It provides opportunities for personal development and social integration on the basis of [31].

Skills that provide mobility in the course of professional activities become increasingly important both for the individual and for the effective functioning of society as a whole. Education gradually became associated as a result not only literacy and mastery of the fundamentals of science, and one category that provides its greater involvement with the actual needs of the individual and society, a category that indicates a high level of commitment to quality education. Thus creating is the concept of functional literacy. It is the result of constantly increasing demands on education, which should allow for the preparation of both general and professional culture, including social, economic, technical, technological, etc. competence.

Functional literacy is considered as:

- building on basic literacy and contrast a dynamic character (it depends on certain external conditions and changes in operating conditions literacy can be replaced by illiteracy);
- situational characteristics of the individual quality of the person that acquires, develops and changes through education and training throughout life;
- standard and specific qualifications whose core is reasonably available for use in the years to acquire the status of 'capacity', i.e. within the compulsory general education for years to ensure effective handling of all adolescent personality with basic life functions that expect and support the process of

its full participation in the system of social relations;

- integral component of the process of education (general and vocational), which aims to provide a general level of culture of each individual and the nation as a whole, knowledge of the values, attitudes and standards of modern civilization;

- dynamic structure of two main components - one (the so called core) represents the competencies necessary for the implementation of a wide range of activities that need to be formed in the school, and the other is variable depending on the specific parameters and requirements for the role should play a man in a specific activity, subject to the formation mainly in vocational training and various forms of lifelong learning;

- set of competencies that are acquired in training which has activities character, so it is assumed that technological learning in general education area is favorable for the formation of several of its major components.

The objective of this research work is to explore the nature, structure and elements of functional literacy, as well as opportunities for its formation by changing the requirements of technological learning in general education.

To achieve this objective shall be made:

- theoretical essence of functional literacy, the emergence and development of its image as a quality of the individual;

- analysis program basis for the construction of functional literacy of individuals in the system of technological learning and define its basic content elements can be formed by it;

- structural-functional model outlining the rates and directions of the process of developing functional literacy technology training.

At the beginning of the century functional literacy was taken as a set of skills in reading, writing and arithmetic. There are on this basis a number of studies mostly in the field of andragogy. At the beginning of this term is associated with the concept of basic literacy, but gradually differentiated with a separate category and importance, occupying different status in research training [1, 4, 14, 15, 16, 26, 30].

Being an educational category it is applicable to various branches of sciences. As a result functional literacy can be interpreted from different points of view. Formation and development of functional literacy have a strong effect to a series of research works in the sphere of technology education in the area of general education. A basic question is how technology education forms the functional literacy in students as it is an important element in the further development of the individuals in the society.

The subject of study of technology education is technologies. Every studying which includes

teaching and mastery of technologies could be named technology education [9].

The emphasis is usually on industrial technologies though in the structure of technology education, but social technologies are also examined, especially those that are applicable to everyday life.

The technology education develops along with the development of the technologies [11]. During the industrial period in the twentieth century technology education was presented in the form of industrial art and crafts showing the manner and lifestyle of the industrial society. As a result of the achievements of the high intelligent, fast developing society along with the socially significant technologies, the technology education changes its contents and makes them explicit [17]. “Nowadays the role of the technology education is of greater importance because of the need for modern right choice of profession, considering the labor market of professionalisms and the increasing variety of technical means and new technologies at work. We should also have in mind the mobility of different professions and occupations in the context of market economy; the increasing role of the family and small business in which the functions of each participant is constantly increasing” [22].

The main purpose of technology education through its cognitive characteristics is show to the students a specific system of knowledge which will serve as a base first: for adequate professional orientation and right

choice of career; second: for rational application of professional preparation and third: need and willingness for coordination of personal and social interests. By using them we teach students a social method to solve the problems in the society, a rapid adaptation in all spheres of life in altering conditions [18, 33].

This teaching guarantees the unity of the basic functions of the educative work (educational and developing). The student’s personality is developing by means of technical and technological knowledge and skills which form personal characteristics connected with the emotional attitude to technologies, technological processes and their creative elements [10].

RESEARCH QUESTION

Technology education is a favourable environment for the purposeful formation of the basic elements of the functional literacy [4, 5].

Functional literacy is defined as term after made dissertation research [8] which includes:

1. *Degree a specific type of competence characteristic for a given, relatively independent factor to function adequately in a given sphere;*
2. *A system of interacting components;*
3. *A system of components which form a certain level of education.*

Functional literacy is scrutinized through prism of technology education which must realize generalized structure of different types literacy: technical,

technological, computer, health, ecological, aesthetic, communicative, legal and economical shown in figure 1.

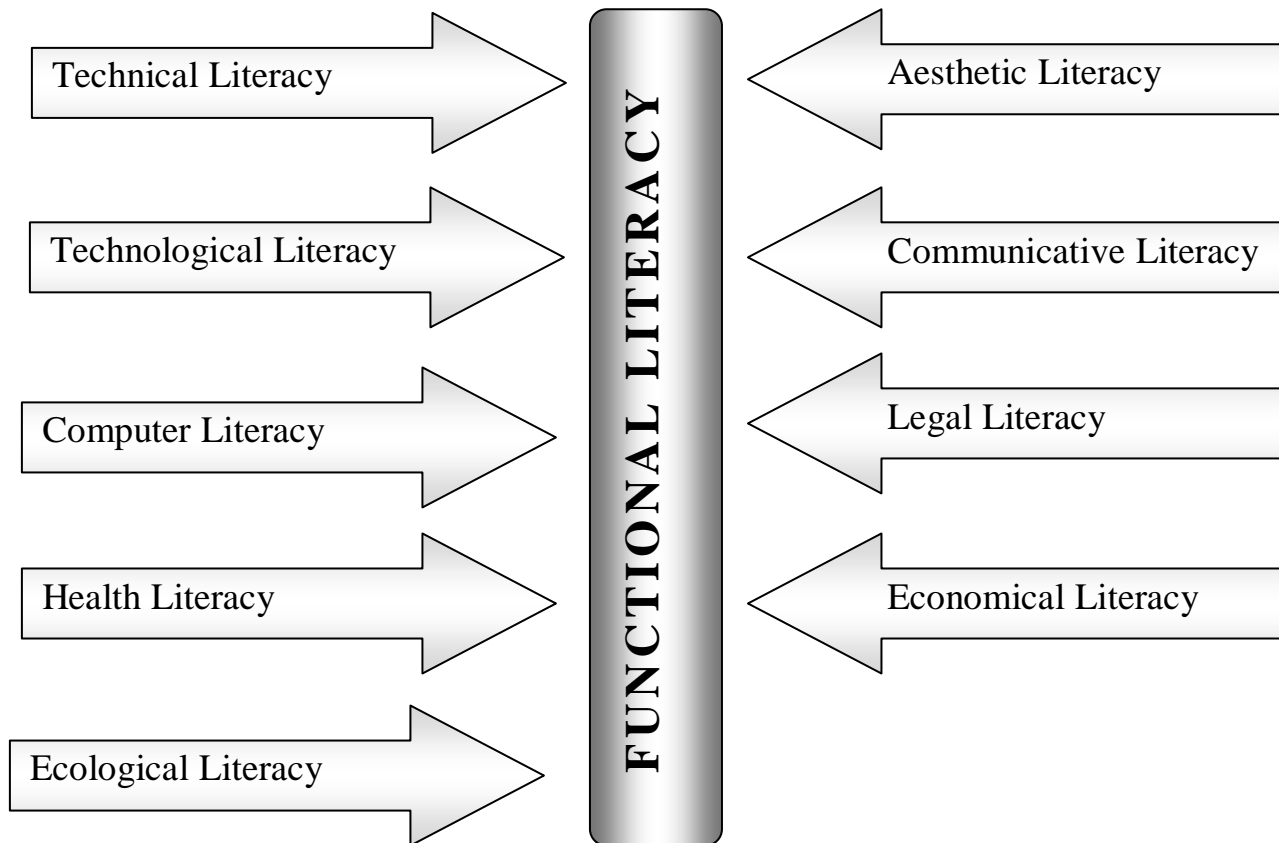


Fig. 1 Structure of Functional literacy forming trough technology education

The contents of these literacy was developed of the base syllabuses in technology education [7] through comparison with offers documentation in guide by UNESCO for technology education [31] and project TAA by ITEA [20]. These documents are best examples of modern technological approach to training in the world.

According to the purposes of this study the functional literacy is

considered as a category, integrates a number of structures of erudition. It is seen as a set of integrative summarized competence which can be analyzed relatively self-separate structures of literacy. Within technology education in the country, it can be described as a generalized structure of different types of literacy: technical, technological, computer, health, ecological, aesthetic, communicative, legal and

economical. This view is a development of the idea of G. Klyucharev and E. Ogarev in several situations [21]:

First – the specification and analysis of structural elements of functional literacy in terms of content and the specific role of technological learning in general education of the Bulgarian education system.

Second – integration of some basic elements such as civil and political literacy and guide their analysis to their development through specific labor law relationships that can be modeled in educational and work environment.

Third – considering the socio-communicative literacy primarily as communicative in business relationships and perform various functions in team interaction.

Fourth – the formation of a relatively independent elements such as health and environmental literacy, which allows to consider more operational program content of technological training to work on improving its structure and work for stronger links with other subjects such as Biology, Chemistry and Geography.

Fifth – the differentiation of technical and technological literacy of technology because it is assumed that technological literacy is generally very general concept concerning literacy and the implementation of social technologies

and their elements are present in the structure of economic, health, communication, etc. literacy.

Sixth – behavioral and methodological skills in the study are considered primarily as an "unwritten program" that occurs every hour by the very style of organization of educational work process, through the intervention of the teacher in continuous emerging educational situations in the realization of one or another work assignment. While improving other types of literacy is a matter of refinement and education programs for technology training in this type of literacy problem is mostly associated with the improvement of educational technology.

Accepted as level of education, functional literacy involves “a person's ability to solve standard life tasks in different spheres of activity-based applications of our knowledge (for the simplest case is assumed to act in algorithm)” [23, p. 28]. So they set to standard “functional literacy” refers to various skills such as:

- General skills formed during the period of general education;
- Cross-curricular skills, leading to practical applications, we have a system of knowledge for solving life's problems;
- Practical skills for interaction of students with different social institutions (social skills and social communication technology) and
- Skills needed to continue from general to vocational education.

The authors of these standards [23] examined the functional literacy of the two countries, which are interrelated and complementary:

- One party content-activity-which represents left "technology base" for human life in the future,
- The other party has need motivation that determination inner

Technical literacy as an element of the functional literacy form specific knowledge and skills for different types of materials, the building blocks of technology and the basic mechanisms used in it. At that literacy is the most active transfer of knowledge and skills from other disciplines in the field of natural science and mathematics. In forming technical literacy students are introduced to different types of material reality that surrounds us. Students acquire knowledge as to the name and origin, and the properties and their application. Based on this knowledge with students is to develop skills to perform various operations with common household in a variety of materials. This allows them to compare and analyze different objects with different materials and determine the advantages and disadvantages of each type of material used. Competencies that form the building blocks for the technique and the basic mechanisms allow students to be able to discern details, connections, mechanisms observed in plant and equipment. This, in turn, enables them to distinguish and describe the various ways and principles of

attitude and mental preparedness of students to:

- Raising the level of education;
- Choice of profession;
- Orientation in the adult world;
- Cultural values of society;
- Communicative activities in the new social environment.

operation of technical equipment widely used in everyday life.

Table 1 describes the third element of technical literacy - working with widely used measuring instruments. Through this unit students perform various operations on the measurement. They acquire knowledge and skills to use various types of lines, scale and geometrical constructions in the preparation of preliminary sketches and simple drawings. Forming and developing skills for measuring length and weight in common household measuring devices.

Technology literacy as an element of functional literacy can be expressed by the ability of the trainees to orientate in the world of technique and technologies, their function and relations in the society; the ability for competent and effective resolving of different kinds of problems from different professional areas; the ability for acquiring general point of view by means of integration of theoretical knowledge and social experience; a specific set of knowledge in natural sciences and correct interpretation of the cultural,

social, economical and political results of the past and present technologies.

Computer literacy as part of the functional is expressed in primary (elementary) activities for computer work. Training in computer technology is used as a tool for searching and creating certain information and its presentation in different ways. For this purpose, word processing programs for word processing, processing of graphics and photos. Knowledge and skills that are acquired are: to know the basic rules for operating a computer, to use the computer as a tool for information using different computer programs.

Health literacy as a component of the functional is expressed in the ability to care for themselves and other members of society. In this study it is considered as made up of eight elements that form the knowledge and skills of students associated with the ability to care for themselves and for other members of society. This literacy is one of the most important for the existence of man as a biological system [28]. Within the technological training health literacy is associated mainly with the formation of competencies for feeding and processing of food storage and serving as an output. Great attention is paid to hygiene and nutrition, which formed in students a positive attitude towards a healthy lifestyle.

Ecological literacy as an element of the functional literacy is the ability to protect the environment. This literacy is a prerequisite for understanding the links between man and nature, how he purposefully affects it and what the consequences are. According to M. Tzhanokova "Development of the biological sciences, especially of ecology, ethology, the negative change in the environment and living systems are a factor in the development of environmental ethics. To solve the emerging problems requiring compliance with norms and values in interaction with the environment" [29, p. 19].

Students gain knowledge and skills to protect life on Earth, which determine the environmental awareness of every individual. The purpose of this literacy is to form pupils presented for both nature conservation and the environment created by man. Students gain knowledge in environmental standards and skills for their compliance. Great attention is paid to the consequences of environmental pollution and the importance of environmental protection activities here.

Aesthetic literacy as a component of functional literacy is the ability of students to express their feeling of beauty. Aesthetic literacy in students is formed for sorting rational workplace and place to store tools and materials in the workshop, the design of technical documentation;

decorating their hand made products from different materials.

Communicative literacy as an element of the functional literacy is the ability to understand the other members of the society; effective mastery of technique in learning the “languages” of verbal and nonverbal communication in a certain group; the ability for mutual understanding and cooperation. Communicative literacy skills include the use of techniques for verbal and nonverbal communication. According to S. Dzhonev “When talking about communicative function of communication is meant that it people exchange plans, thoughts, feelings, etc. in this context and in connection with a joint activity” [12, p. 32]. Therefore the basic element that is differentiated within the technological training of this kind of literacy is teamwork and guidance in the basic requirements for business communication.

Legal literacy as an element of the functional literacy is the correct interpretation and understanding of the personal rights and obligations as all individuals are equal members of the society; proper understanding and protection of the general and personal interests; proper interpretation and understanding of moral criteria, personal rules and orders; the ability to adapt in different professional and social situations. Legal literacy believes that the element that differentiates this type of literacy is a competence in the field of labor relations. Through this type of literacy

students understand not only the characteristics of labor relations, but also the rights and obligations of the employment relationship. Students gain knowledge in different types of responsibility and consequences for non-compliance in the process of labor and skills to distinguish between procedures and contractual arrangements for the commencement and retention (competition, discrimination, temporary, permanent contract, a contract period of probation).

Competencies acquired through literacy that enables students to show initiative and self-criticism and self-assessment and introspection of their activities. They prepare themselves psychologically for the specifics of the business relationships that await them. Through this literacy learn to master certain requirements that must be followed in employment after reaching age 16.

Economical literacy as an element of the functional literacy is as follows: acquiring specific knowledge of economic activities; proper understanding of the economical relations; good organizing skills, control and management of the working process. Economical literacy need of every individual, because the economy is present in our daily lives. Through technological training form an overall picture of economic knowledge and skills they will need in their future career as citizens as consumers or producers. Economic literacy in technological training is aimed at the formation of economic

thinking in students the ability to differentiate and understand the basic concepts of economics.

The functional literacy can be viewed as a system of competence (knowledge and skills). It is a basic structural element of all literacy mentioned above. They interact,

complement and intertwine with one another. The various types of competences determine the elements of the functional literacy in the context of technology education. (Tab.1)

Tab.1 Elements of the functional literacy as a result of technology education

TECHNICAL LITERACY

Work with materials

Acquiring specific knowledge of the structural elements of the technique and basic mechanisms

Work with wide-spread measurement devices

Work with wide-spread manual instruments

Applying elementary operations on different technical means such as machines and tools

TECHNOLOGY LITERACY

Projecting, constructing and modeling of technical objects, creating technological and instructive maps

Preparing technical documentation (designs, technical drawings and plans)

Evaluation of projects of technological processes and objects

Acquiring specific knowledge in the area of energetic technologies

Acquiring specific knowledge in the area of informative and communicative technologies

Acquiring specific knowledge in the area of transport technologies

Acquiring specific knowledge in the area of building technologies

Acquiring specific knowledge in the area of agro and zootechnologies

Focusing on reasons for the evolution of technologies

COMPUTER LITERACY

Know the basic rules for computing

Use your computer as a tool for information

Use various computer programs

HEALTH LITERACY

Acquiring specific knowledge of food products

Acquiring specific knowledge of the preparation of cookery products

Acquiring specific knowledge of saving the cookery products

Acquiring specific knowledge of serving the cookery products

Proper interpretation the importance of hygiene and strict observation of hygienic rules

Ability to keep a healthy way of living

Acquiring specific knowledge in case of emergency (rendering first aid)

ECOLOGICAL LITERACY

Proper interpretation the importance of protecting the environment

Acquiring specific knowledge of plant and domestic animal infections

AESTHETIC LITERACY

Knowledge of beauty and art

Maintaining order in the workplace, equipment maintenance

Formation of technical documentation

COMMUNICATIVE LITERACY

Work in group and proper orientation in the basic requirements of social partnership

LEGAL LITERACY

Acquiring specific knowledge in the context of labor-legal relations

ECONOMICAL LITERACY

Acquiring specific knowledge of economical factors

Acquiring specific knowledge of the matter and accomplishment of working processes

Acquiring specific knowledge of the matter of trade organizations

METHODS

This scientific work in solving research problems using different methods:

1) Study and analysis of literary sources – used to identify any developed theoretical approaches to solve the problems associated with the development of functional literacy in general education, on what theoretical basis are constructed models of the formation of the functional literacy of individuals and in what terms are used. The analysis

of the literature provides the theoretical basis for solving the problem set out in the purpose and objectives of the study.

2) Monitoring. Used a direct observation of the teacher in relation to the achievements of students in technological education. The results are recorded in a protocol-form criteria that it be carried out to assess student performance in relation to the core of functional literacy are:

- Ability to work on guidelines;
- safe work habits;

- habits to maintain order in the workplace;
- signs of pragmatism;
- honesty;
- demonstration of responsibility;
- self-confidence;
- Ability to work in a team;
- Learning to be a leader;
- mobilization skills at work;
- acts of initiative;
- striving to please others (to create an image);
- Response to “boss” (learning to obey and show discipline).

It is believed that these are indicators of functional literacy, which must be present in each subject activity, regardless of its specific technical and technological content. Therefore, they are marked as targets for technological training in the most recent international instrument for the development of technology education in the world proposed by UNESCO in 2003 [31].

3) Test is the method used in this study to establish the level of functional literacy among students in general their preparation This method was selected in order to rapidly measure the abilities, achievements and interests of the students [13]. The tool of this method is didactic test.

Developed for the purposes of this study didactic tests, according to some classifications published in the literature [24, pp. 46], can be described as a test of the form:

Excellence, objective, written, objective optimization, for a limited time, current, non-standardized. They consist of free-response questions (open test). The advantage of this type of testing is that testing is able to demonstrate more fully their knowledge, be creative and reasonably put their thoughts and ideas.

The students’ knowledge and skills of the elements of the functional literacy in technology education can be explored by empirical survey. Students from K-5, K-6, K-7, K-8 are being included in the study on the base of their technology education. The aim of the researches is what the functional literacy level in technology education is expected to be. The test method is being used [2].

The tool of this method is didactic test. Test empirically in this survey consists of free answer questions (open test). The advantage of type of test shows that the tester has the opportunity and the advantage to express as far as it is possible his/her knowledge, creativity, thoughts and conceptions.

The students’ achievements are valued by means of different criteria and indicators [6] which are structured in taxonomy of Bloom's level of knowledge, understanding, application, analysis, synthesis and evaluation (Bloom, 1956).

4) Mathematical and statistical methods

Results after the tests to study the level of functional literacy, formed by technological training are subjected to statistical analysis. Used methods:

- Measurement of basic statistical parameters: arithmetic average (\bar{x}) and mean square (standard) deviation (σ);

- Check the correlations. The idea to implement this method is not only to establish a link between the different types of literacy (technical, technological, computer, health, ecological, aesthetic, communicative, legal and economical) entering the structure of

functional literacy in the technological training, and to determine their effect (the degree of correlation between them).

RESULTS

The results of the tests are further discussed and examined by a statistic analysis in order the presence of the relations and the degree of dependence in different types of literacy to be established. In the core of this analysis lay the correlation factors which express the intensity (narrowness, rate) of the relations in the examining quantities presented on Tab.2 (different types of literacy in this case).

Tab.2 Correlation factors of the functional literacy of the students mentioned in the survey

Types of literacy	Technical literacy	Technology literacy	Computer literacy	Health literacy	Ecological literacy	Aesthetic literacy	Communicative literacy	Legal literacy	Economical literacy
Technical literacy	1	-	-	-	-	-	-	-	-
Technology literacy	0.85	1	-	-	-	-	-	-	-
Computer literacy	0.79	0.73	1	-	-	-	-	-	-
Health literacy	0.42	0.49	0.54	1	-	-	-	-	-
Ecological literacy	0.32	0.63	0.54	0.42	1	-	-	-	-
Aesthetic literacy	0.68	0.52	0.62	0.51	0.38	1	-	-	-
Communicative literacy	0.22	0.52	0.86	0.45	0.56	0.65	1	-	-
Legal literacy	0.35	0.03	0.3	0.05	0.11	0.21	0.07	1	-
Economical literacy	0.51	0.29	0.35	0.13	0.21	0.14	0.17	0.39	1
<i>Total value of correlation intensity</i>	0.57	0.56	0.64	0.45	0.48	0.52	0.5	0.28	0.35

Table 2 shows the correlations of the results for general functional literacy of students from K-5 to K-8. Narrowness of the correlation is evaluated by numerical values of the coefficients are interpreted as estimates on how narrow the test subject. All numerical values in Table 2 are positive which means that the types of literacy interact positively. They are positively correlated with growth of a tendency to increase literacy and other skills there and back.

From the values of the correlations between different types of skills that come into the functional literacy structure within the technological training predominates significant dependence. Although higher the degree of dependence of computer literacy - 0.64, it is also significant. While moderate correlation was observed only between health and environmental literacy with other types of literacy. Only dependency (relationship) between legal literacy and other types of literacy is low (0.28). Suggesting that it is may be seen as a single component of functional literacy.

DISCUSSION

On this basis we could conclude, that that legal literacy is determined to be a single literacy considering the structure of the technology education syllabus in our country. It is an independent literacy and we can examine it as a separate unit in the structure of the functional literacy. All the other literacy is interdependent.

Health, environmental, communicative, legal and economic literacy in the structure of functional literacy, formed through technological training should be seen together and complete their formation separately is impossible. Different types of literacy should not be formed separately as structural units of functional literacy, and parallel and in unity. It should not be special attention only on one or other literacy because it is independent from other species.

If different types of literacy entering the structure of the functional form of balanced technological training, they come in direct interaction with each other and their relationship will go from significant to a great or very great. Thus, functional literacy will form a complete and will produce even higher levels of performance [3].

Functional literacy of every individual in a society defines social, political, economic, cultural, etc. factors of the country. It is seen as a key element of the overall development of society, which is closely linked to economic and social priorities, characterizing the need for labor, not only today but in the future.

The term "functional literacy" means the level of education required of every person to be able to properly and fully exist in the society in which it is located. It is the "minimum amount of competence", ensuring the proper functioning of the individual in the system of social relations, which in turn determine the person's ability to interact with the external

environment and the fastest to adapt to it.

One can be functionally literate in a certain period of his life, according to Y. Totsheva, “but remained at this level of education without being increased and updated without improving their personal skills and qualities may be that after a few years has not been able to meet the requirements for its level of literacy and education, due to its unpredictable conditions. So he has functionally illiterate” [27, p 32]. Consequently, the functional literacy is characterized as a stage, and an aspect of continuing education of persons. It appears as the extent necessary for the existence of the individual and for its performance in today's environment and its development.

The term “functional literacy” can be described as a summary structure, which is a combination of different types of activities and abilities in their continued development become a certain type of literacy. Thus, the functional literacy becomes quality of personality characterized by the following main features:

- The ability for conscious choice of professional education and career development, competent and effective problem solving in professional activities;

- Knowledge of business skills to analyze specific financial and economic situations;

- Knowledge and understanding of their rights and obligations in the broader context of social life, self-resolving marital and domestic issues,

- protection of personal rights and orientation in their duties;

- Ability to communicative actions in an unknown environment, acquiring "language" of verbal and nonverbal communication skills for understanding and cooperation;

- Awareness of the characteristics of the society, the orientation of the possibilities offered by life satisfaction and the development of their spiritual interests, skills to solve social problems and protect common interests;

- Knowledge of the natural sciences, social sciences and humanities, as well as historical and contemporary cultural values;

- Knowledge and understanding of moral norms, rules official or other labels, skills adequate behavior in various situations;

- Preparedness for life in the modern world, orientation problems and its values, as well as moral norms of society;

- Ability to orient oneself in the world of art and technology;

- And many other skills in various fields necessary for the normal functioning of a person in the society in which it is located.

All this leads us to argue that functional literacy is a very important concept in scientific knowledge about education. Formation and its development imposed by the continuous improvement of the requirements for the level of education, which strives to create basic skills in man by which he successfully carried out his

professional activities and functions in everyday life. This increase is a result of the requirements of social development in its various dimensions and is determined by the quality of the educational process.

Based on the rapid growth of both the industrial technologies and social technologies, the formation and development of functional literacy level of education is too complex structure of general education. Hence it is necessary to make a number of changes, not so much update the content of education it is in its dynamics.

Functional literacy appears to be the result of systematic learning activities expressed in adequate control of the ability to use knowledge about the surrounding reality, and solutions to problems encountered in practical activities.

Construction of functional literacy is socially meaningful activity; its successful implementation requires the creation of a comprehensive system of technological training that covers all schools and all components of the educational process. As the main result of increasing technological change is the difference in the levels of technological capability and understanding. Workforce of the future should have the ability to use, manage and understand technology.

CONCLUSION

Technology education as an extremely obligatory part of general

education provides students with the possibility to learn and practices the general principles of the main production processes – high technologies and their management in all spheres of manpower activities. The system of technology education creates “a bridge” between school and real life experience and provides preconditions for acquiring functional literacy.

The problem of functional literacy as a level of erudition is extremely outstanding in theory and practice. Its formation and development are required by the constant increasing of requirements of general education. Its main purpose is to create basic working skills for effective professional and social application.

Functional literacy is a concept with a very wide range of formation. It is formed as a quality of the person, which includes a variety of skills in order for a person to function properly, according to the changes of the world in which he lives.

Functional literacy is associated with the concept of "lifelong learning" because is the degree of development of the person in different stages in her life. Its formation began in the wider context of general education, passed later as a requirement of training and continues as one of the factors of educational system and different forms of life-long learning.

To achieve high quality of the educational process must be addressed first to the teaching staff. He should be well qualified and it is

potential to meet the modern demands of society. The second important are educational programs. They must meet the expectations of students and their interest for the full training. And thirdly must supervise the management of educational institutions. Quality of education can be defined as a balanced process between the individual and the demands of society.

In a quality educational process is being unlocks students' interest and motivation their development throughout their period of existence. They in every period of their development will be functionally literate people worthy of society in which they live.

Functional literacy is a very important characteristic of the individual and therefore is one of the main concerns of any society. It is a new concept in scientific knowledge, which covers a number of areas of professional and social status of each nation.

Formation and development of functional literacy required by the continually increasing requirements to the level of general education, which strives to create basic skills in man by which he successfully carried out his professional activities and functions in everyday life. This increase is a result of the requirements of social development in its various aspects.

The question of functional literacy level of education is very relevant in theory and practice, as it may be associated with continuing education aimed at enriching the creative potential of the individual.

Functional literacy is considered as an educational category by which you can measure the specific experience and specific set of competencies that provide important new shades of education. The link between functional literacy and the demands of society can seek to answer the questions "What", "How?" and "Why".

The statistic analysis of the researches of the functional literacy with the students from K-5 to K-8 degree shows that the creation of the separate elements of the functional literacy is a whole system connected with the education which main priority is enriching the creative potential of the personality.

Looked at in depth, the construction of functional literacy is socially meaningful activity. Its successful implementation requires the creation of a comprehensive system of technological training that covers all schools and all components of the educational process as a major result of increasing technological change is occurring sometimes very significant differences in the levels of technological capability and understanding of the individual actors of the society and the labor market. Particular importance in this process is updating the content of the training in the pre-extraction of so-called initial "capacity", which coincides with the lower secondary education, especially in the last years of the completion of primary education.

Functional literacy, viewed in the context of technological learning is a dynamic system, depending on the changes and requirements in a given stage of development of society. Changes occurring in the present moment in Bulgarian education are associated with changes in our society and trends in globalization of education systems. "A concrete example of this is the emerging

standard systems of curriculum, teaching and assessment, that the pursuit of high quality and explicit access to education, utilization of information and communication systems. Changes must guarantee high mobility of human resources with a view to solving the problems of the labor market and the desire for career development" (Strategy).

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