

## QUALIFICATION FEATURES OF THE TEACHER OF "TECHNOLOGY" AND THE TECHNOLOGY OF ITS DEVELOPMENT

Tilavova Matlab Muhammedovna

Dotsent of "Methods of primary education" department, BSU

### ABSTRACT

The article deals with the qualifications of technology teacher`s features (personal, professional qualities; competence; creativity). There given theoretical and practical considerations regarding the stages and technologies of developing the features.

**Keywords:** Competence, creativity, personal qualities, professional qualities, technology teacher.

### INTRODUCTION, LITERATURE REVIEW AND DISCUSSION

Personal qualities contribute to the formation of a person as a skilled professional, that is, personal and professional qualities have general features.

The process of professional development is the source of professional self-determination. Career selection, vocational education and training, and professionalism are the stages of professional development. They imply the formation and perfection of personal and professional qualities. Personal characteristics and motivational foundations of professional activity include free communication, emotional stability, the pursuit of dominance, social maturity, social stamina, dependability, independence, confidence, self-control, excitement, tension, desire for success, self-assessment.

Professional qualities include confidence, mobilization, accounting and economic evaluation of work, observance, perseverance, endurance, resourcefulness, ability to use various and sophisticated techniques, foresight, discipline, creating a favorable atmosphere in the community.

#### Comparative analysis of personal and professional features

Personal features	Professional features
Social activeness	Professional activeness, to be organizational
To follow the rules of behavior in life	Professional behavior, etiquette
To have own ideas and self-confidence Patriotism, humanism, intellectuality, responsibility and duties for parents and country Social knowledge and intelligence Having communicative culture	Professional freedom, tolerance Professional duties and responsibilities, discipline, observations Professional knowledge Communication culture
To be sociable, honest, having conscience, to be attentive	Speech etiquette, honesty, having conscience, to be attentive to personnel
To be agile, giving responses quickly, to be modest	To be initiative, agile, modest
To be fond of labor, to realize mistakes, to research independently	To be fond of labor, to realize mistakes, creativity

Professional qualities include communication skills, emotional stability, social resilience, compassion, self-control in unexpected situations, social maturity, consciousness, honesty, aspiration to affirm universal values, reasonable trust, self-control, determination, initiative, mobilization, observation, discipline, practical work habits and more.

**Creativity** (lat., "Create"- to create smth., "creative"- creator of smth.) - creative ability of an individual, which characterizes readiness to develop new ideas and is part of the creative ability.

The creativity of a person is manifested in his or her thinking, communication, emotions and certain activities. Also creativity is an important factor in talent. In addition, creativity dictates mental acuity.

According to P.Torrence opinions the concept of "creativity" is as follows:

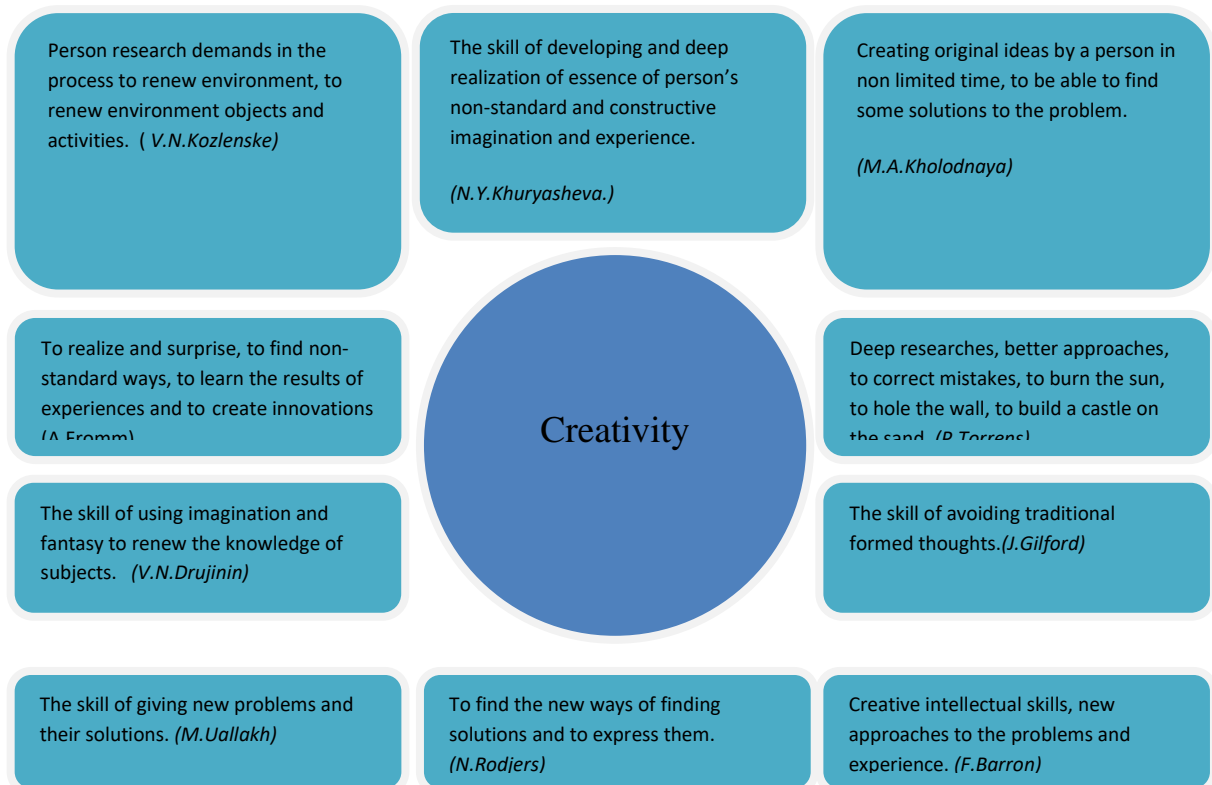
- to propose problems or scientific hypotheses;
- checking and changing the hypothesis;
- identification of the problem on the basis of formulation of decision results

In many countries around the world research on personality creativity research is being held around the world, including the US, UK, France and Germany. The results of research in this area include the empirical results that are attracting the attention of modern educators, as well as scientific hypotheses and concepts.

In many concepts, giftedness and its developmental basis are characterized by creative abilities and abilities that are reflected in the concept of personality creativity. Creativity can be manifested in thinking, in communication, in certain activities. It can in general describe the person or his or her individual abilities.

There are various definitions of the concept of "creativity" (form 1). In most cases, "creativity" refers to the ability to acquire and improve technical skills, to explore problems from a different perspective, to find new and unconventional solutions. A person's creative abilities are not directly related to his or her cognitive abilities and are not always reflected in intellectual tests. On the contrary, creativity is explained not only by the amount and variety of acquired knowledge, but also by the ability to perceive new ideas that can refute firmly-grounded concepts. Creative ideas usually arise during relaxation in the dispersal focus produced by serious research beforehand.

Strong competition which dominates in the labor market context of market relations requires every specialist to have a professional competence. *So, what is competence? What qualities are reflected in the core of professional competence? What competencies should a teacher have in his or her competence?* At the same time we are talking about these and other ideas.



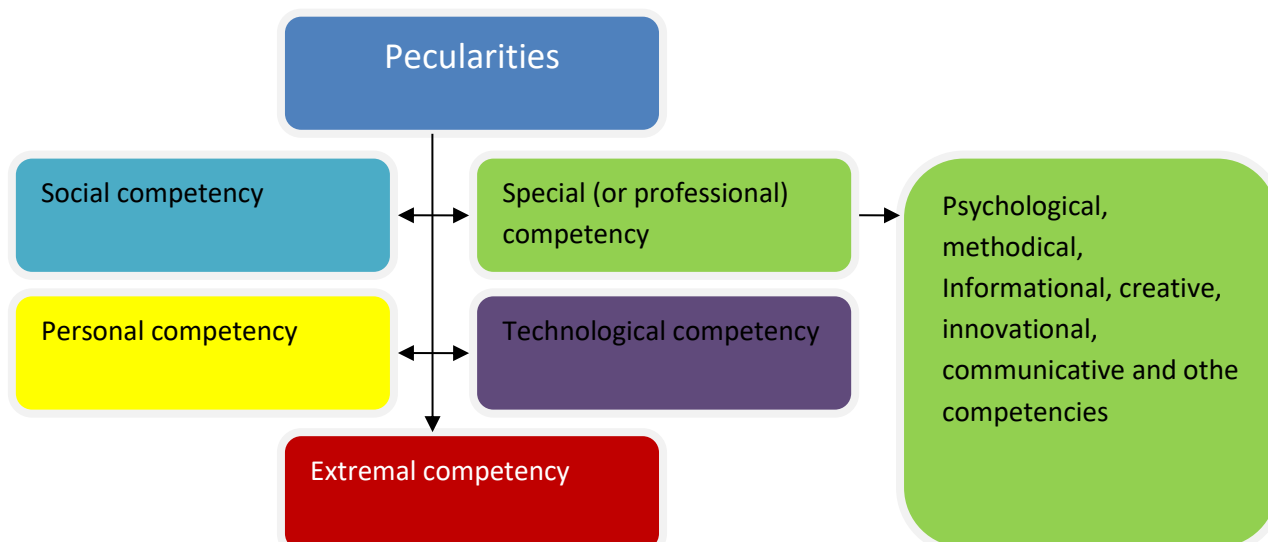
**Figure 1. Definition of creativity**

The notion of "competence" came into the field of education as a result of psychological research. Psychologically, competence refers to "unconventional situations, how a specialist behaves in an unforeseen situation, communicates, takes a new path in interacting with competitors, uses ambiguous tasks, uses conflict-filled information and progressively evolves in complex processes."

Professional competence is in each individual area, rather than individual knowledge and skills implies the acquisition of integrative knowledge and action (slide 11).

Competence also requires continual enrichment of specialist knowledge, new information, understanding important social requirements, the ability to search for new information, process it and apply it in its activities.

Different features can be formed on the basis of professional competency (2-form)



**Figure2. The qualities that are reflected on the basis of professional competence**

The followings are a brief overview of the qualities that are reflected on the basis of professional competence.

**1. Social competence** - the ability to act in social relationships, have the skills, communicate with subjects in professional activities.

**2. Special competence** - preparation for the organization of professional and pedagogical activities, rational decision of professional and pedagogical tasks, realistic evaluation of the results of activities, consistent development of CRC, which are based on the competence of psychological, methodological, informational, creative, innovative and communicative competence. They represent the following content:

**a) psychological competence** - to create a healthy psychological environment in the pedagogical process, to establish positive communication with students and other participants of the educational process, to be able to recognize and respond to various negative psychological conflicts in a timely manner;

**b) Methodological competence** - methodically rationalize the pedagogical process, correctly define the forms of education or educational activities, the appropriate choice of methods and tools, the effective use of methods, the successful use of the tools;

**c) information competence** - search, collection, sorting, processing, and purposeful, efficient, efficient use of necessary, important, useful information in the information environment;

**d) creative competence** - a critical and creative approach to pedagogical activity, the ability to demonstrate their creative skills;

**e) innovative competence** - to introduce new ideas for the improvement of the pedagogical process, improving the quality of education, increasing the effectiveness of the educational process, its successful implementation;

**f) Communicative competence** - be able to communicate warmly with all participants in the learning process, including students, to be able to listen to them and to have a positive impact on them.

**(g) Personal competence** - consistently achieving professional growth, enhancing qualifications and demonstrating internal capabilities in professional activities.

**h) Technological competence** - the use of advanced technologies, enriching vocational and pedagogical knowledge, skills and abilities, the use of modern tools, techniques and technologies.

**j) Extreme competence** - ability to make wise decisions and act in the event of an emergency (natural disasters, technological breakdown), pedagogical conflicts.

If above mentioned aspects are possessed by the teacher of "Technology" it will provide the following:

**1. Focus on teaching topics that will be taught, not on subjects**

The method of interdisciplinary communication and design combines the integration of natural sciences into technology, engineering, and mathematics. This includes training for engineering related professions.

**2. Using of scientific and technical knowledge in real life**

With practical exercises, children will be shown how to apply scientific and technical knowledge in real life. In each lesson, students develop, build, and refine the models of modern design. They study a specific project, creating a prototype of a real product. For example, students will be introduced to the concepts of engineering, engineering design, electrical engineering and designing, technological process, technological mapping when designing a simple robot.

**3. Development of critical thinking skills and problem solving**

Students will develop critical thinking and problem-solving skills needed to cope with the challenges that everyday students face. For example, children assemble a fast car model and then test it. If the expected result is not achieved after the first test, they will think about the reasons and find out. Maybe the wheels are too big or the engines don't work properly. After each trial, the existing deficiencies are eliminated.

**4. Increasing of self-confidence**

Students will work towards achieving their goals in launching robotics, machine and aircraft modeling and more. After each test, the model is refined. In the end, they will overcome all problems by themselves and will achieve their goals. It means inspiration, victory and joy for students. After each victory, they will be more confident in their own strength.

**5. Active Communication and Teamwork**

During the dialogue, a free environment will be created to express their views and debate. They learn to speak and make presentations. Pupils are always teachers and classmates. If pupils participate actively in each competition, they will remember the activity better.

**6. Development of interests on technical subjects**

Pupils do their tasks with love because of the developing their interests during the Technology lessons in primary education. It serves to develop pupils' interests. If the activities are dynamic and interesting, pupils do not bore and gain useful knowledge from the lesson.

**7. Creative and innovative approach on the project**

Technology lessons are conducted in six levels: **question (task), discussion, design and building, to test and develop**. These levels are the basis of systematic approach. Using of different possibilities simultaneously can serve as a basis of creativity and innovations. Studying of science and technology at the same time brings to create new innovations.

**8. The bridge between science and career**

According to the different types of assessment nowadays from 9 to 10 specialists are fossilized the importance of knowledge. They are: an engineer-chemist, engineers of oil, analytics of computer system, engineer-mechanics, engineer-builders, technicians and others.

**9. To prepare pupils to technological innovative life**

Enable to prepare pupils to live in technologically developed world. In last 60 years technology is rapidly being developed like the opening of Internet (1960), GPS technologies (1978), scanning of DNA and iPod (2001). Everybody use iPhones and smartphones nowadays. We cannot imagine the world without technologies. Development of technology continues and STEM will be the base for it.

## REFERENCES

1. Fachglossar – Betriebliche Ausbildung. Deutsch-Russisch. Bundesministerium für Bildung und Forschung. 2008. Bonn, 60 s.
2. Berufsausbildung sichtbar gemacht. Bundesministerium für Bildung und Forschung. 2003. Bonn, 72 s. 52
3. Bildung in Deutschland. Bundesministerium für Bildung und Forschung. 2004. Bonn, 6 s.
4. Ausbildung und Beruf. Bundesministerium für Bildung und Forschung. 2007. Bonn, 222 s.
5. Berufsbildung in Deutschland. Europäisches Zentrum für die Förderung der Berufsbildung. (CEDEFOP). Thessaloniki. 2007, 102 s.
6. Jugend und Berufsbildung in Deutschland. Bundesinstitut für Berufsbildung. 1994. Berlin, 31 s.
7. Richard Arum, Melisa Velez. Improving Learning Environment: School Discipline and Comparative Perspective. Stanford University Press, USA 2012.
8. H.Fry, S. Ketteridge, S.Marshall. Handbook For teaching and Learning in Higher Education. New York, Routledge, 2009.
9. Higher education in Japan. Higher Education Bureau, Ministry of Education, Culture, Sports, Science and Technology. 3-2-2 Kasumigaseki, Chiyoda-ku, Tokyo 100-8959, Japan Tel: +81-3-5253-4111 (Reception).