THE USE OF ACTIVATING METHODS IN THE TEACHING OF VOCATIONAL SUBJECTS

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Abstract: Nowadays, it is necessary to use not only classic teaching methods but also non-traditional methods that can activate students to work independently and to find appropriate solutions to problems. At secondary vocational schools, the basis of students' education is the teaching of vocational subjects. Graduates of secondary vocational schools are expected not only to have professional knowledge, but also the ability to communicate, solve problems independently, work in a team, orient themselves in information. Therefore, teachers should include activating teaching methods in the process of teaching professional subjects, which will enable students to develop and improve key competences. Our goal is to describe examples of several specific activating teaching methods that can be applied to the teaching of various vocational subjects.

Keywords: Key competences, vocational training, activating methods

1 Introduction

Key competences as a new phenomenon in education represent a mutual connection between upbringing in the family, upbringing in the school environment and social influence on human development. Nowadays, the process of general competence development is perceived as a necessary process for applying to the labor market. All member states of the European Union deal with key aspects at least on a political level. Some countries of the European Union have enabled their citizens to participate in an open project for the development of lifelong learning.

1.1 Definition of relationships and basic terms

In the understanding of the term qualification, there is a consensus in the professional literature. According to Bendíková (2014), by the term qualification we understand the set of abilities (knowledge, skills, habits, experience) necessary to obtain official competence to perform a certain activity. Another explanation of the term qualification can be found in Hrmo-Turek (2003), who claims that qualification is mediated by external organizational processes, has a substantive orientation, and elements of individual ability to act can be certified. Bendíková (2020) already explained the qualification of an older date, but we can consider his interpretation still current. This is a classic definition of qualification, where qualification is seen as a synthesis of three components - education, experience, and individual characteristics of the worker. In professional literature, the term qualification is often associated with the adjective key. Pavlov (2018) also use the combination of qualification with the adjective key. They see key qualifications as similar to key competences. As the first concept of key qualifications, Kissné Zsámboki (2021) characterizes them as: "such knowledge, abilities and skills that do not show an immediate and limited relationship to certain diverse practical activities."

He distinguishes four basic forms of key qualifications:

- basic qualifications,
- horizontal qualifications,
- expanding elements,
- acquisition factors.

The aim of these forms is to recognize connections and subsequently manage changes. Mužík (2004) claims that the key qualification includes two elements. On the one hand, it consists of a person's expertise and, at the same time, his ability to transfer this expertise to various professional activities. We can point out that in the professional literature we often find that the authors' statements often diverge and there is a strict distinction between the two concepts, which can lead to the creation of a distorted picture of the given issue. Having competence according to Hrmo-Turek (2003) means that we can orientate ourselves in the situation appropriately, react adequately and subsequently activate appropriate activity, adopt a beneficial attitude. Turek (2014) claims that someone who has the knowledge, skills, or motivation to do what is required in the relevant field in a high-quality and efficient manner is considered competent in a certain field. Competence can be understood as the intersection of acquired knowledge, acquired abilities, skills, forming attitudes, value orientation, motives for action (Turek; 2014). Competence is the unique ability of a person to act successfully and further develop their potential based on an integrated set of their own resources, in the specific context of various tasks and life situations, combined with the possibility and willingness to make decisions and take responsibility for decisions.

2 Components of competence

Competence is a relatively stable personality characteristic. If a manager has competence, he can use it in any company and at any management level. Competence tells us how the bearer will behave, think and express himself in certain situations (Porubčanová; 2018). We can divide the individual components of personality that enter into competences:

- Motives
- Traits
- Perception
- Knowledge
- Skills

In order to properly teach and identify competence from a number of published procedures, we present only the following:

- determination of the appropriate measure of work performance in order to identify top workers for the specified position and collect data on the given performance,
- analyze the elements of work behavior, create a list of characteristic behaviors, balance and analyze the grouping of behavioral manifestations,
- select and use tests to assess competences,
- determine the causal relationship between competences and work performance,
- the result is a validated model.

2.1 The importance of key competencies

Key competences are sets of knowledge, skills and attitudes that each individual needs for personal fulfillment and development, for involvement in society and successful employment. Key competences are the most important of the set of competences, they are suitable for solving a whole range of mostly unpredictable problems that will enable an individual to successfully cope with rapid changes in work, personal and social life (Hrmo, Turek; 2007). Key competences are the entire spectrum of competences that go beyond the boundaries of individual specializations. They are an expression of a person's ability to behave appropriately to the situation, in harmony with himself. As Belz and Siegrest (2001) state, acquiring key competencies means having the ability and being prepared to learn throughout life. We can learn even as an adult. "Learning to learn" - this means the competent way in which an adult, adapted to the situation, accepts a lifelong challenge, especially in a collegial relationship with others, so that for him life is learning and learning is life. It is difficult to know and understand the competences correctly. It is important to recognize which behavior contributes to or determines the success of the given position that will be held by the employee. Without it, it is not possible to prepare successful training and development programs, to maximize the success of the selection of workers for given positions or to establish standards of good
performance (Pavlov, 2018). Key competence is an internalized, interconnected set of acquired knowledge, skills, abilities, attitudes and value orientations that are vital for the quality development of an individual's personality, his active involvement in society, effective employment and lifelong learning (Hrmo-Podaril, 2013). The Institute for Economic and Social Reforms (2006) defines key competences as abilities and skills that enable an individual to successfully integrate into social and working life. This means holding different job positions and functions, solving unpredictable problems and coping with rapid changes in work, social and personal life.

The 2006 European Framework of Reference recommends that Member States use key competences for lifelong learning and sets out eight key competences:

1. communication in the mother tongue,
2. communication in foreign languages,
3. competences in mathematics and basic competences in the field of natural sciences and technology,
4. digital competences,
5. learn to learn,
6. social and civic competences,
7. initiative and entrepreneurship,
8. cultural awareness and expression.

Communication competences

Having the communication skills of competence means perceiving, expressing and interpreting concepts, thoughts, feelings, facts and opinions in written and oral form and, from a linguistic point of view, engaging in communication in an appropriate and creative way in various situations and social environments, including in foreign languages.

Mathematical and scientific competences

Having these competencies means functionally using mathematical knowledge and skills in various life situations, using basic knowledge and methods of science to clarify natural laws, applying them in the field of technology and explaining scientific and technical progress.

Information competences

Having information competence means using a computer and its accessories to obtain, assess, store, create, present and exchange information and communicate in collaborative networks via the Internet.

Problem solving skills

Having problem-solving skills means being ready to creatively and critically solve ordinary work and non-work problems independently.

Learning competencies

Having learning competencies means learning to learn effectively, to continue and persist in learning, to organize one's own learning, to effectively manage time and information, both individually and in a group, to evaluate the results achieved and progress in learning, to realistically set needs and goals of your further education.

Social and personal competences

Having these competencies means setting appropriate goals for personal development in the field of interest and work, taking care of your health, cooperating with others in the group and contributing to the formation of appropriate interpersonal relationships based on your knowledge of your personality.

Work and business competences

Having these competencies means turning thoughts into actions, optimally using your personal and professional prerequisites, applying creativity, innovation and risk-taking, planning and managing projects to achieve goals, for successful application in the world of work, seizing opportunities for building and developing your professional career, also in lifelong learning.

Civic and cultural competences

Having these competencies means recognizing the values and attitudes essential for life in a democratic society and adhering to them, constructively participating in the events of society, acting in accordance with its sustainable development, realizing the importance of creative expression of thoughts, experiences and emotions, supporting the values of national, European and world culture.

In addition to communication in the mother tongue, communication in foreign languages, competence in mathematics and basic competence in the field of natural sciences and technology, digital competences, learning to learn, social and civic competences, initiative and entrepreneurship, cultural awareness and expression, some countries also develop cultural sensitivity, work and business competences and health education. In 2018, the European Council adopted the updated Council recommendations on key competences for lifelong learning. The aim of the recommendations is to support the development of key competences and basic skills through:

- high-quality education,
- professional training and lifelong learning for all,
- support of teaching staff,
- analysis of approaches to assessment and verification of key competences.

The Education and Training Monitor report (2019) presents the goals of the European Union. These goals relate to early school leaving, early childhood primary education, graduate unemployment rates, tertiary education, increasing literacy, numeracy and science literacy, and adult education.

According to the decision of the European Parliament and the Council of the EU no. 1720/2006/EC of 15 November 2006, which implements the program in the area of lifelong learning, defines lifelong learning as "all general education, vocational education and training, non-formal education, vocational education and informational learning during life, where its result is the improvement of knowledge, skills and abilities in personal, civic, social or employment-related efficiency". According to this definition, we can understand lifelong learning as a process of adaptation to changing conditions during life and a prerequisite for continuous personality development. Eight key competencies have been identified and identified by the document as those needed by all individuals to:

- personal satisfaction and development,
- active citizenship,

Hrmo and Turek (2003) attribute the economic benefit of key competencies to the following phenomena:

- productivity growth and increasing competitiveness,
- development of an adaptive and qualified workforce,
- creating an innovative environment.

The active approach of the individual and the modern concept of educational policy is an emphasis on the concept of learning, which enables multiple, frequent transitions between education and employment, enabling the acquisition of "qualifications and competence through different paths and at any time during life" (Pavlov, 2021). The labor market is a complex market that
requires the expertise, knowledge and ability of each individual individually. Each of us has encountered increasing demands on individual job positions, knowledge of the company, or stressful situations. Therefore, according to Hrmo and Podaril (2013), much attention is paid to lifelong learning, but also to the improvement of qualifications and the development of key competencies, because they are directly related to the employment of a person in the labor market. Other educational opportunities are also defined by the OECD, which understands educational opportunities in both the formal and informal sectors as one interconnected system that should enable the acquisition of qualifications in various ways and at any time during life. The process of changes, whether they are personal, work or social, of which there are many during life, tend to be a reflection of the need for lifelong learning. Adaptation to change is a complex increase of those who cannot adapt to change. That is why the concept of a learning organization resulting from the strategy of lifelong learning, expressed in the Memorandum on lifelong learning, 2000, was created. The European Council and the member states of the European Union have defined a comprehensive lifelong learning strategy for Europe with the objectives of:

- guaranteeing general and permanent access to learning for the purpose of acquiring and renewing skills, the so-called "new basic skills for all";
- visible growth of investments in human resources;
- development of effective teaching and learning methods, or so-called teaching and learning innovation";
- a significant improvement in the way of understanding and evaluating the results of learning as an activity and its results with an emphasis on evaluating learning;
- ensuring access to information and advice;
- bringing the opportunity for lifelong learning as close as possible to people, i.e. homes, regions, etc.

The Memorandum on Lifelong Learning (2000) also talks about the so-called lifelong learning. This defines learning so that learning takes place regardless of life stage, place, time and form of learning. The lifelong learning strategy focuses on six basic ideas:

1. new basic skills for everyone,
2. more investments in the development of human resources,
3. innovation in the teaching and learning process,
4. the value of education,
5. new concepts of consultancy,
6. finding a path leading to easier access to education

(Veteška, Turieckiová; 2008).

2.2 Criticism of key competencies

Currently, we are witnessing a transformation of the content of education in favor of favoring competences. Bendíková (2020) calls this phenomenon a "turn to competences", Turek (2014) talks about competence orientation in adult education. It is possible to observe tendencies to replace classic encyclopedic knowledge with knowledge useful for life, while emphasizing especially their applicability to real life. This trend is aptly expressed by Marks-Lajčín (2017). He emphasizes that mental capacity should no longer be used as a repository of facts, but should be used as a trigger headquarters for intelligent responses. Kaščák and Pupala (2010) talks about the requirements for the new curriculum, which is also reflected in:

- new emphasis at the level of regional education standards, qualification profiles,
- performance standards of teachers and in national testing systems.

Kaščák and Pupala (2007) compare the change of the curriculum due to the prioritization of competences to its change to the business curriculum. Here we come across the facet of assessment quality of education based on the criterion of economic utility. At the same time, it is desirable to realize that such characteristics as entrepreneurship and initiative are explicitly expressed in the list of key competencies. The authors, and I with them, are aware of the reality of assessing individuals based on the sum of their competencies, which contribute to the economic prosperity of society. A similar opinion is held by Ribbenol (2004), who draws attention to the transformation of money into more money and certainly not the humanization of the world. He sees learning as an act of subjectification, not liberation, not the education of individuals, but only the education of "capital" through the qualification training of subjects for potential purchasers of labour-power goods. We find the coercive rather than the voluntary character of lifelong learning in the work of Kaščák and Pupala (2010): who claim that the education model framed by the requirement to shape competences is a radical intervention in the overall concept of education. Its basic feature is the effort to dissolve the dividing line between general and professional education through the establishment of competences as the goals of education and as the principle of designing its content. to cover such needs that belonged more to the goals of professional education. I find their warning about the disappearance of general education in its generally cultural and academic concept alarming and worthy of thought. Kisež Ľažimbok (2021) claims that he particularly notices changes in relations between social groups: "The introduction of competences in education is the basis of new power relations between social groups, because it introduces asymmetry in favor of employers, entrepreneurs, economic practice at the expense of schools, teachers, students, general culture.

3 Vocational secondary schools in Slovakia

We can generally define a school as "an institution that specializes in training as opposed to a company that offers training in conjunction with the production of goods. Some schools, such as those for barbers, specialize in one skill, while others, such as universities, they offer a wide and diverse set. Schools and companies act as substitute sources for specific skills" (Porubčanová, 2018). Secondary vocational school, which offers opportunities for us will investigate increasing the employability of its graduates, we understand a school which graduates can obtain upper secondary education completed by the matriculation exam. At evaluation of a (specific) secondary vocational school, we must take into account that its competences are limited to some extent by applicable legislation. With the reform in 2008 in education they also introduced state educational programs (hereafter referred to as SVP), which define and delineate the content of education in schools in accordance with internationally valid standards. SVP defines:

a) the generally binding goal, content, scope and conditions of education at ISCED for the given groups of study fields,
b) the target quality of the student's personality, which the student has after completing education and training to reach,
c) rules for creating school educational programs, evaluation of results education,
d) binding basis for determining financial resources." (SVP)

The Vocational Education and Training Act of 2009 established the rights and obligations of all participants and created space for the involvement of employers and employers' unions as well as private investment capital in the vocational education and training system. The reform of secondary vocational education was supposed to enable a more flexible profiling of graduates of study fields according to the conditions of the school. At the same time, the fields of study should respond to the needs of the regional labor market and the individual abilities and interests of the pupils. All state secondary schools in the Slovak Republic are obliged to comply with the Educational Act (245/2008 Coll.). According to this law, the goal of upbringing and education is to "enable a child or pupil to get an education (according to this law), to acquire competences, especially in the..."
field of communication skills, oral skills and written skills, use of information and communication technologies, communication in the state language, mother tongue language and a foreign language, mathematical literacy, and competence in the field of technical sciences and technologies. He is autonomous in his personal development, has the ability to reflect on his process of learning, and can accept feedback. The graduate can develop a value system. The graduate is able to verify and interpret information and subsequently establish hypotheses. He is able to use established operational knowledge to solve problems. He can use various forms of communication: oral, written, and technical natural sciences and technologies. The graduate can use all available forms of communication when processing and expressing information of several types, has adequate oral and written expression. The graduate masters self-presentation and knows how to translate the results of his work to the public, where he uses professional language. The graduate understands the meaning and applies the forms of communication skills that are the basis of effective cooperation, based on mutual respect for rights and obligations to take personal responsibility.

Competences to apply mathematical thinking and cognition in the field of science and technology - the graduate uses mathematical thinking to solve practical problems in everyday situations. It uses mathematical models of logical and spatial thinking, natural sciences and technologies, for lifelong learning, which will enable him to make scientifically based judgments, while he knows how to use the acquired operational knowledge to successfully solve problems.

Competences in the field of information and communication technologies - the graduate effectively uses information and communication technologies in his education, creative activities, project teaching, expressing his thoughts and attitudes when solving real-life problems. The graduate realizes the importance of recognizing virtual and real life. He understands the opportunities and possible risks associated with the use of the Internet and information and communication technologies. He knows how to think critically and make decisions based on information and knowledge sources. He can use peripheral devices necessary for the operation of the used program. The graduate can assess the credibility of information sources, process critically to obtain information and then record, sort and store this information in such a way that he can use it at work or in his personal life.

Competence to solve problems - the graduate applies appropriate methods based on analytical-critical and creative thinking when solving problems. He formulates arguments and evidence to defend his results. The graduate knows the pros and cons of individual solutions, where he is also aware of the need to consider their risk levels. Can resolve conflicts constructively and cooperatively. The graduate is able to clarify the most serious features of problems in the form of systematic knowledge and to use various generally applicable rules for this purpose. The graduate can evaluate the meaning of various information, independently collect information, sort it and use only those that are most important for clarifying the problem. The graduate can take creative risks, adequately criticize, take a clear approach to solving problems, make quick decisions, be consistent, inspire others when looking for ideas, initiatives and creating possibilities.

Civic competences - the graduate is aware of basic humanist values, the meaning of the national cultural heritage, applies and protects the principles of democracy. The graduate understands his personal interests in connection with the interests of the wider group. He is aware of his rights in the context of a responsible approach to his duties, contributes to the fulfillment of the rights of others. The student can understand the systemic nature of the world. It recognizes that decisions made, and actions taken by individuals or groups will have an impact on the global present and future. The graduate is oriented in the issue of uneven economic development, ethnic, religious and racial conflicts, terrorism and suggests ways to eliminate them. He understands the concepts of justice, human rights and responsibility, where he can apply them in a global context. The graduate observes the law, respects the rights and personality of other people, their cultural specifics, speaks out against intolerance, xenophobia and discrimination. At the same time, the graduate is actively interested in political and social events in Slovakia as well as in the world.

Social and personal competences - the graduate reflects his own identity, builds his own autonomy and independence as a member of the whole. Based on self-reflection, he sets his goals and priorities in accordance with his abilities, interests and needs. Significantly participates in setting corresponding short-term goals aimed at improving own performance. He knows how to verify and interpret information and subsequently establish hypotheses. It creates a value system. The graduate is able to fulfill a task plan aimed at the given goals and try to improve them through the use of self-control, self-regulation, self-evaluation and own decision-making. At the same time, he can verify the acquired knowledge, critically assess the opinions, attitudes, and behavior of others. He has a responsible attitude towards his health, he takes care of his physical and mental development, he is aware of the consequences of an unhealthy lifestyle.

Work competences - the graduate can set goals with regard to his professional interests, critically evaluates results and actively approaches the role of teacher for these goals. He is autonomous and manages innovative changes. The graduate understands the principles of business and considers his assumptions when planning and applying it. Can obtain and use information about educational and employment opportunities. The graduate understands and is able to evaluate his participation in the educational process and its outcome, which ensures the citizen's right to free movement to live, study and work in the conditions of an open market. He knows how to assess the professional
offer on the Slovak and European labor market and flexibly respond to it through further education. He knows how to present himself and act appropriately during a job interview. He can search for and assess business opportunities in accordance with the reality of the market environment, his assumptions, and other possibilities.

Competencies aimed at initiative and entrepreneurship - the graduate can innovate the usual procedures for solving tasks, plan and manage new projects with the intention of achieving goals, not only in work, but also in everyday life. He knows how to navigate various statistical data and know how to use them for his own business. The graduate recognizes and develops the qualities of a managerial employee with an aspect of communication skills, assertiveness, creativity and resistance to stress. Uses the principles of constructive criticism, being able to criticize appropriately, but also to tolerate criticism from others. He knows the principles of safety and health protection at work.

Competencies to perceive and understand culture and to express oneself with the tools of culture - the graduate is able to express himself at a higher level of artistic literacy through the expressive means of visual and musical arts. He is aware of the importance of art and cultural communication in his life and in the life of the whole society. The graduate knows the rules of social behavior and at the same time behaves in a cultured manner, appropriate to the circumstances of the situation. He is tolerant and empathetic towards expressions of other cultures.

4 Conclusion

All OECD countries agree on the importance of key competencies. The need to develop key competencies at all levels, but also in lifelong learning, has been a topical topic for a long time. According to the obtained information, which is presented in our article, the most important knowledge, skills and abilities that are required to achieve success in employment as well as in personal life are listed. Significant attention is paid to work with key competencies. It is known that the need for key competencies and their lifelong development means that there is potential for a better workplace, personal life or personal development. In the school educational program and subsequently in the study and teaching fields, the graduate's key competencies are developed by making knowledge available in an appropriate and comprehensible manner with an emphasis on the development of all key competences without prioritizing one key competence over another. Suitable key competencies are those that are activated in new situations and subsequently offer a wide range of possibilities for quickly and successfully solving the given problem and coping with the changes that new situations have brought.

Literature:


Primary Paper Section: A
Secondary Paper Section: AM