

JAROSLAV VETEŠKA

## The role of qualifications and competences in initial and further education\*

#### Rola kwalifikacji i kompetencji w początkowej i dalszej edukacji

Abstrakt: Nowa koncepcja kształcenia ustawicznego oparta na przyswajaniu i rozwijaniu kluczowych kompetencji okazuje się ważnym trendem w czeskiej reformie programu kształcenia oraz kamieniem milowym w programie studiów podyplomowych oraz procesie kształtowania Europejskich Ram Kwalifikacji. Artykuł prezentuje dominujący obecnie w Czechach oraz całej Unii Europejskiej model oparty na edukacji i rozwoju kompetencji. Model ten był podstawą zakrojonych na szeroką skalę reform programów kształcenia i nadal ma znaczący wpływ na wszystkich uczestników procesu edukacyjnego. W artykule przedstawiono dane zebrane podczas badań przeprowadzonych w 2011 roku. Owe badania nie tylko potwierdzają potrzebę kształcenia ustawicznego i rozwoju umiejętności przez pracowników, ale przede wszystkim istniejącą po stronie organizacji konieczność antycypowania różnych zjawisk ekonomicznych oraz większej elastyczności w obliczu zmiennych warunków ekonomicznych. Model kształcenia oparty na rozwoju kluczowych kompetencji jest w tej sytuacji optymalny, ponieważ pozwala jednostce odnosić sukcesy w poddanym procesom globalizacji społeczeństwie, na które wpływ mają zarówno zmiany społeczne i gospodarcze, jak i dynamiczny rozwój technologii.

Słowa kluczowe: kwalifikacja, kluczowe kompetencje, reforma programu kształcenia, rozwój zasobów ludzkich, kształcenie ustawiczne, kształcenie zawodowe, edukacja osób dorosłych, rynek pracy, zarządzanie zmianami.

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### Challenges of the modern world

The world is changing and so are educational needs. It can be said that education ranks among the most important factors of the development of an individual and society. Those who want to succeed have to make use of their potential for permanent education and development, ideally throughout their lives. This biodromal context (Veteška, 2011) has recently become important both in terms of psychology and anthropo-philosophy. It represents a new holistic approach towards a human being. Nowadays, rapid technological and knowledge development can be seen in many areas of human activity. Under certain conditions these days may bring lots of hopes and possibilities, but also lots of uncertainties, inequities, individualism and social unrest. The time when an appropriate educational path and consequently a career are chosen is one of the most important milestones in a human life. Future success, wealth, contentedness, and thus happiness or their opposites are decided then.

We should learn about the world and think about it critically in broader global contexts. Our postindustrial society, influenced mainly by the advancement of information and communication technologies, offers a variety of educational approaches applicable both to self-directed learning and traditional teaching forms. To use these sources and possibilities as effectively as possible, modern people have to face a new challenge — striking a balance between the social and economic area. Curricular reforms based on the competence paradigm are intended to meet this aim. Attaining and developing necessary competencies is thus a prerequisite as well as a key to personal and professional development.

A qualified worker still remains a crucial, irreplaceable source of knowledge, innovations and changes, potential for better competitiveness and prosperity in its broadest sense. The ongoing curricular reforms throughout Europe show how slowly the views concerning educational aims and contents change in the education of children, youth and adults, too. It takes a long process for new educational paradigms to penetrate the social life. Changes in educational paradigms are brought about by the rise of new social, cultural and now mostly economic needs, and possibly a new scientific and technological reality.

All of the measures adopted in national and European education policies aim to enable these reform steps, mainly by enhancing the transmission of education systems, acknowledging formal, informal and nonformal learning outcomes to provide formal qualification and opening education to all who are interested through effective careers counsel-

ling and financial support of educational projects (see Šauerová, 1999; Határ, 2010).

The present European society faces various changes especially as a result of globalization. These are primarily the influences which bring challenges in the cultural, social and economic areas and which also cause changes in the world demographic structure and, in the European context, the aging of the population, too. Thus, a need for a broader systemic solution arose. Since the 1970s European institutions have applied the concept of lifelong learning and education, main objective of which is to create a competitive economy, which would also flexibly react to innovations and the development of technologies. The key idea of the abovementioned concept is the development of human potential and active citizenship. Every individual should be able to succeed on the labour market and react effectively to the changing socio-cultural environment. These ideas have been applied in the EU within the whole society with the aim to create a so-called knowledge society and have also been implemented as a strategic developmental framework in companies — free movement of knowledge being a significant factor. The above-stated influences have determined changes in the area of education towards the acquisition and development of relevant competencies.

From the educational viewpoint, the concept of "competency" is therefore of great importance as it shifts educational goals and contents towards a new paradigm. At the same time it sets the ground for innovative approaches to teaching and learning making the competency-based approach a crucial concept of the Czech curricular reform. They can serve as a tool that effectively contributes to the successful management of various life-outcomes. The present society puts, and will be putting, greater demands on the development of so-called generic, key competencies (i.e. psycho-social) and professional competencies of its members. Requirements for the development, use and recognition of professional competences have been increasing accordingly.

Neither application nor development of the conception of lifelong learning is possible unless formal education is functionally interconnected with non-formal education and informal learning. These three educational forms can blend together and complement one another during the course of life. One of the means of the European development strategy's implementation was, then, the creation of an effective tool through which knowledge and skills acquired outside of the official educational institutions could be assessed and formally recognized.

The change in the conception and contents of each stage of education is developed in relation to the concept of lifelong learning that reacts to the current educational and developmental needs of both present and potential participants in initial and further education. Although the underlying principle of educational activities remains unchanged (knowledge is transferred from teacher to student), in modern society its form has been undergoing changes. In the reformed education system the role of teacher is now closer to the role of moderator and facilitator (especially in adult education), the teacher being the students' guide who leads them to knowledge. Tasks are handled by teams, work outcomes are presented, problems are spotted and tackled, project work is used, etc. Modern information and communication technologies are equally influential in the educational process. These objectives have been formally included in the general and specific European strategic documents.

## Czech and European strategic and curriculum documents

In March of 2000, in Lisbon, Portugal, a strategy was adopted which defines the strategic objective of the EU and the method of its implementation during the period up to 2010. The goal was to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion. Its main purpose was to promote the economic growth and competitiveness of the EU. "The aim was to reform the labour market, social protection policies, and education and training to a new knowledge economy growth model" (Rodrigues et al., 2009, p. 74). This Europe would attract investments and a workforce, create more and better job openings and promote knowledge development as a growth factor. That meant supporting research and development, innovations and education. The realization of lifelong learning was absolutely essential. The Action Programme set a goal for the European systems of education and training to reach top quality by 2010. In parallel processes supranational level of the action is being developed: European Areas lifelong learning, tertiary education (the Bologna Process), professional education and training (the Copenhagen Process), and, of course, science and research.

The need for the formal recognition of learning outcomes has led to the creation of the European Qualification Framework, which takes into consideration the outputs from formal and non-formal education and informal learning. As early as 2006, the European Commission suggested developing the European Qualification Framework for Lifelong Learning, which is supposed to serve individuals as well as businesses as a reference tool to compare the levels of the certificates granted by different educational and training systems. The European Commission adopted a document called "Adult learning: It is never too late to learn". It aims to promote adult education, which is a vital component of lifelong-learning strategies, and to stress its crucial importance. The European Parliament and the Council of the European Union also adopted the Lifelong Learning Programme 2007—2013. This programme primarily aims to foster interaction, cooperation and mobility between education and training systems within the European Community.

In implementing the Community Lisbon Programme, the European Parliament and the Council of the EU submitted and passed a Recommendation on the establishment of the European Qualifications Framework for lifelong learning. The framework has 8 levels and encompasses all stages of education, from basic education up to the doctorate level. The Recommendation of the European Parliament and the Council from 23 April 2008, on the establishment of the European Qualifications Framework for lifelong learning says that: "The development and recognition of citizens' knowledge, skills and competence are crucial for the development of individuals, competitiveness, employment and social cohesion in the Community. Such development and recognition should facilitate transnational mobility for workers and learners and contribute to meeting the requirements of supply and demand in the European labour market. Access to and participation in lifelong learning for all, including disadvantaged people, and the use of qualifications should therefore be promoted and improved at national and Community level." It is clear that taking full advantage of this will be possible only if the relevant frameworks are developed at the national level with unambiguous interconnection with the European Framework.

Professional qualifications, based on competencies gained within primary and secondary education and further developed in tertiary education, should be an output from the National Qualifications Framework. These competencies cover all the underlying aspects of each particular occupation, including what is today the best practice, that is, abilities to adapt oneself to demands and knowledge yet to come and understanding situations which give opportunities to perform competently (Veteška, 2010).

As the expiration date of this programme was approaching, the ministers responsible for education from all EU member countries adopted a successive document called Strategic Framework for European Cooper-

ation in Education and Training during the Czech presidency (Education and Training 2020, ET 2020). Besides the ideas concerning European education it lists 4 strategic goals by 2020, which are related to lifelong learning in their orientation (be it formal, non-formal or informal). Among the priorities are:

- 1. Realization of lifelong learning and mobility.
- 2. Enhancement of the quality and effectiveness of vocational education and training.
- 3. Promotion of equality, social coherence and active citizenship.
- 4. Increase in creativity and innovations including entrepreneurial abilities at all levels of education and training.

The strategic framework ET 2020 delimitates the so-called European benchmarks — target figures of the average outcomes from all EU countries in common priority areas. These should be met by 2020. Among them the following are to be found:

- By 2020 at least 15% of adults should be engaged in various forms of lifelong education,
- By 2020 at least 40% of adults between 30 and 34 years of age should have accomplished tertiary education.

This fact, along with the further development of educational sciences, opens up more ways of developing new, more effective tools to make adult education more purposeful, interesting and accessible. Companies increasingly use the competency-based approach as a tool for education, development and management of human resources. Thanks to this a new concept of "learning organization" has come into existence which is an analogy of the generally conceived "learning society." Purposefully identified and described competencies, needed for individuals and organizations (companies) to fulfill their targets and tasks, will make possible the completion of several homogenous sets (group and type of competencies, or competency-based models). There is a wide range of competency-based profiles and models along with certain ways to make them that can be utilized in many areas of human resources management and development since their aim is to "systematically track employees' job performance and progress, identify their need for professional and other types of growth, and provide them with HRD opportunities from entry level through senior or advanced levels of a job or occupation" (Dubois, 1993, p. 20). They are also important for performance assessment and have the capacity to be of help in career planning (see fig. 1).

The creation of learning organizations arises out of a stimulating environment that enables employees to develop professionally and motivates them to take the initiative and responsibility for their own growth within the organization (company). The optimization of company

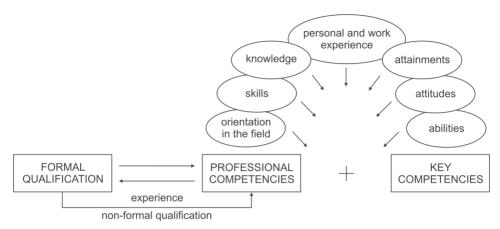


Fig. 1. Competency-based qualification model Source: Veteška. 2010.

processes is subject to the formulation of the necessary competencies of each employee in view of their role within the company structure. The strategic model of human resources aims at a greater efficiency of organizational dynamics and flexibility, which enables the company to be competitive. The impact of competency-based strategic models on the organization's economy can, among other things, be expressed in these words: "Using a competency model helps remove the guesswork of where to focus scarce resources by differentiating between programmes with the most impact on performance and those with little relevance to behaviours people need on the job" (Sanghi, 2005, p. 73). It should reflect the employers' demands that state the organization's needs. Trends in labour market development are thus represented by the requirements of a worker's qualification.

# Czech curricular reform and the adopted competence-based approach

The widely discussed competence-based approach, which has served as an underlying paradigm to many an organization, be it a business company or a non-profit organization, has found its use in the curricular reform of Czech formal education as well as other institutions providing informal education. The notion of being "competent" and therefore possessing necessary competencies has proved to be easier to grasp and a useful tool too, since it comprises, or may comprise, those factors and aspects of life that tended to be either omitted or doubted of in other paradigms such as intelligence-based and others. Contrary to possible initial expectations that the competence paradigm is, since its introduction and a short discussion, a tool in its final shape, we have witnessed a slightly different turn. The theory of competencies and models has so far been tested against years of practical use and experience which has brought results in all the areas of application — not the same in all of them, but varying in relation with specific scientific, organizational and, last not least, philosophical environment in which it was put in use. Of significance were, of course, the qualities of the initial understanding the users of the models and concepts had of competence and competencies, that is we clearly face here the question of the primary instruction.

Considering the application of the competency-based paradigm in the area of initial education, which was one of the key pillars of the Czech curricular reform, we are now in a better position to have a more exact look into the genesis of the tool as used in the school system so far. Like any novelty the curricular reform first met with negative acclaims along with the positive ones. One of the reasons was that teachers were not always instructed to a sufficient degree on the philosophy introduced by the new paradigm and, as ones who execute a pragmatically-based occupation, did not get a clear picture of what practical changes it may or may not bring about in their educational realities. Thus a space was, probably unintentionally, created for many a scenario to develop. There were teachers who welcomed the reforms as something to enable them to exercise their own creativity and ideas and put them to the test. Some theories even noticed the possible vacuum in curricular regulations and misinterpreted their "freedom" on the grounds of the presumed fact that any means they would use, within legal limits, could be in a way considered, interpreted and thus justified as always right because developing competencies. On the other hand, and contrary to this one stance, another one readily emerged encouraging those teachers who might have felt disheartened saying that, in accordance to a possible interpretation, nothing needed to change in the way the perceived and approached their pedagogies.

With the reform came the task for schools to create their own strategic documents and develop their curricula accordingly. Teachers thus reacted along the lines of their conviction. Some approached the task creatively and spent hours on end toiling away, others remained faithful to their pedagogical experience and drew on it heavily. Both parties did, however, dipped into the forms and contents that had been educationally transmitted to them, which was and still is remarkable when going through the created and, throughout many years, adapted curricula.

As competencies were stated for each stage of formal education, there also arose questions of methodological nature. Were the reform and the newly introduced paradigm a signal from authorities that methods considered modern should be applied? Would frontal education be frowned upon? But not only these questions crossed the worried minds of some teachers — increasing concerns about moral discipline, school values and learning environment became poignant.

The development of the concept in question as it was and has been seen can be followed in several points. The first one would relate to the new term of competence and competency. It is not impossible to somehow, more or less intuitively, understand what being competent looks like and that it is situation-bound. But what precisely are competencies and which should we take into consideration? It was soon realized that this problem had already be taken care of, as competencies had been dictated from above. The only question remaining was therefore the question of "how." There might be a better understanding of what is meant by competencies, how they should be acquired and what that really, that is judged by inspectors, means to the day-to-day practice. What remains to be solved, maybe more philosophically and ethically than in any other way, is the misapprehension felt by many teachers about the implications of the paradigm on moral qualities favoured at school as they are in society. The line of argument goes like this: if "being competent" is to be the leading achievement indicating educational usefulness of school, therefore it needs to be earnestly acknowledged what "competencies" do allow success to many people, besides the official competencies stated by the European and state level strategies. These competencies are not always virtues with a somewhat pessimistic view of today's society in general some ethically problematic human qualities are clearly seen to rank among tools for success. Is it then fair for teachers to weaken pupils who manifest such qualities? Does it not go directly against the competence paradigm? Do the teachers have enough support in society and its organs in stumping down on such qualities or will their efforts be dismissed as naïve instead of praiseworthy and worth of backing up and protection? These questions are still open and sometimes rather vivid as every teacher who decides not to avoid thinking deep seems to necessarily go through a certain philosophical process the end of which might be marked by an organic integration of the competence paradigm into their pedagogies. That would be probably one of the milestones in the executing of the reformatory efforts. This may be regarded as part of the longstanding discussion: school vs. life outside of school — what school offers and what life demands.

As far as the documentary part of the reform is concerned, school curricular documents are still open to changes and improvements. Their

fulfillment is obligatory and scrutinized by the school inspection almost solely through class registers. These documents must be at everybody's disposal, including pupils and students. It has taken and in many cases will take some time for these documents to fully serve as many practical purposes as possible.

## Research on competencies in employees — interpretation of research results

In 2011 a research was carried out within the project entitled "Andragogical model of adult education based on acquisition and development of key competencies," which was funded by the Czech Science Foundation. It concerned the dynamics of changes in the labour market demands for (key) competencies in managers and specialists, that is, abilities, skills, knowledge and attitudes now demanded by employers of their employees (both already hired and the new applicants).

The main aim of the research was to monitor the development of the labour market, namely, to find out about current employers' demands concerning the acquisition and development of the (key, generic) competencies they expect in their employees in managerial and specialist positions. Demands were not limited to "key competencies" but comprised the whole category, that is, abilities, knowledge, skills and attitudes. The other part of the research was focused on employees' development and education, the role key competencies play in company strategies, and the further development of the organizations. These questions are also significant with regard to the ongoing economic crisis and thus partly suggest possible changes in the field of further education. The research did not primarily aim to compare the collected data in the context of the economic recession, although some aspects indicated a direct impact on the area of further professional education. One hypothesis, which concerns the dynamic increase in employers' qualification demands, reflects the current situation in labour market demands, mainly as far as possibilities and trends in the education of employees are concerned.

In the first part of the research an analysis of job advertisements for managerial and specialist positions (from March to June 2011) was used, where the total was comprised of 796 advertisements for managerial and 849 for specialist vacancies. Only space advertising in country-

wide daily print in the Czech Republic was included. The other part of the research was carried out by means of a questionnaire-based enquiry among a selected group of employees. This enquiry was realized in the period between September and November 2009. The research was aimed at the tertiary sector of the economy, that is, the service sector, which carries great importance within the national economy and therefore has big growth potential. Employees occupying managerial positions (chief executives, directors, etc.) were the main focus. For the sake of the written enquiry a total of 550 subjects (corporate bodies) were randomly selected. This sample was asked about their needs and the demands they had of their employees (in terms of abilities, skills, knowledge, attitudes and competence), the value they ascribed to key competencies, other competencies they liked to see in their employees, key competencies they expected to increase in importance, and which they help develop in their employees through internal or external educational sources (training, courses, development programmes, and the like).

As of 2011, amid the general conditions under which business in the Czech Republic takes place, the following employers' demands in the area of knowledge, skills, abilities and personal characteristics, which jointly form the desirable structure of professional and generic competencies, were identified: educational achievements (86%), gained practice (82%), foreign language (67%) and managerial abilities (45%). The employers regarded communicational abilities and skills as an absolutely essential competency (77%), as well as decision-making abilities (69%), problem-solving abilities (64%), the ability to carry responsibility (60%) and the ability to motivate and lead others (56%).

For employers in the Czech Republic, so-called special (specific) professional competencies are of greatest importance, especially those acknowledged by certification (formal qualification) and those gained through practice.

In 2011, the most demanded competencies in managers (categories: essential, very important, important) were:

- communicational abilities and skills (98%),
- professional manners and behaviour (98%),
- managerial abilities and behaviour (96%),
- adaptability (96%),
- teamwork abilities, cooperativeness (94%),
- foreign languages (90%).

In 2011 the competencies that employers helped develop through further education were dominated by:

- foreign languages (81%),
- computer literacy (75%),

- communicational abilities and skills (71%),
- managerial abilities and skills (65%).

One part of the questionnaire focused on prospects, that is the potential for development of organizations. The following areas are considered to be the most significant by managers over the next 5 years:

- acquaintance with new technologies and their use (73%),
- development and innovation (65%),
- improvement in communication with customers (49%),
- corporate culture, including positive social relationships not only inside of the organization and loyalty (47%).

Time flexibility and willingness to travel are the areas with the least development. The question remains how these competencies can be developed best. Another such area is proficiency and effort. This competency was not marked as one of increasing importance by any of the respondents. Adaptability is also among the competencies being poorly developed, although respondents ascribe more importance to it than employers. The case is the same for time flexibility and willingness to travel, competence in working with information, and analytic and conceptual thinking, even though the difference here is minimal. However, the most striking difference can be found in willingness to learn and enroll in further education. This competency is expected by the respondents to increase in importance in the future, along with foreign languages in the second, and competence in working with information in the third place. Interestingly enough, as far as importance was concerned, a decreasing trend was spotted in willingness to learn and competence in working with information (Veteška, 2011).

### Conclusion and future perspectives

The concept of key competency-based lifelong learning and education enables continual development, but even more than that, it facilitates change of professional orientation, adaptability skills and employability. At the same time, it forms a prerequisite for a better balance of professional, private and family life, that is, various social roles (successful performance standards and patterns in different life situations).

The aforementioned curricular changes, represented by competences and qualifications, through which learning outcomes are accentuated, are only tools for enhancing educational systems in Europe. They will help to ensure opportunities for obtaining recognized qualifications that are useful on the labour market and perfecting competencies to be successful in work and in one's social and personal life.

The competency-based approach has significantly influenced the principles of human resources development and management as well as employers' demands, or, more generally, labour market demands. Globalized society brings with it not only a number of economic and social problems but also challenges and motivational tools, which lead to changes and innovation. These challenges and circumstances are closely related to changes in the conceptions, contents and objectives of each type of education that has been developing in relation to the European conception of lifelong education and learning. The competency-based approach also reacts to the changing educational and developmental needs of both present and potential participants in further education as well as various target groups with specific educational needs, thus showing its social dimension.

It is obvious that general education enhanced by key competencies will enable individuals to better react to the changing environment, while promoting lifelong education activities. In the European Union formal processes in further education are now supposed to be related mainly to the National Qualification Frameworks, which ought to serve the purpose of an output standard in the form of learning and educational outcomes.

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