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Formation of New Competencies in Students of Secondary Vocational Education Institutions in the Context of Resource Centers

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Abstract

In the article, the authors focus on the development of new competencies necessary for the development of a professional career at secondary vocational schools. The authors believe that resource centers based on professional educational organizations established in the Republic of Tatarstan can provide invaluable assistance in the formation of new competencies. The authors base their selection of competencies necessary for professional career development on a holistic construct consisting of four components, the content of which is developed taking into account the specifics of the digital economy, new requirements of the labor market, modern educational and professional standards.

Keywords: competence, professional development, students of secondary vocational education institutions, resource centers.

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Introduction

Contemporary vocational education rapidly changes. One of the innovations of high demand among professional educational organisations is the resource center. It is common knowledge that the resource center refers to the stage of professional development of the skilled worker, which is connected with mastering of modern production technologies complying with technological, organisational and economic conditions existing in advanced enterprises and organisations of the respective industry.

For that purpose the Resource Center is equipped with educational equipment (simulators, computer simulation systems etc.), which permits to periodically reequip educational facilities in conformity with changes in real production technologies, as well as to simulate various technological and production conditions for tackling a set of educational and production problems typical for real professional activity of the modern highly qualified worker (Toporovsky, 2014).

However, the resource centers do not serve as centers for new competence development in students. It is obvious that the labour market changes, and the education should keep pace with new technologies. To keep pace here means to have an opportunity to quickly rebuild its content. Formation of new competences on the basis of the resource centers can serve as one of the possible areas.

Purpose and objectives of the study

New competences should be formed in students of professional educational organisations in order to develop variability of demand in the market.

Literature review

Currently, many specialists are engaged in the problem of forming new competencies. In foreign practice, the above-mentioned problem was addressed by researchers Moss and Tilly (1996), who consider soft skills not as technical knowledge, but as skills and character traits that determine individual behavior. Hurrell (2009) believes that soft skills are interpersonal and intrapersonal abilities that determine the model of a person's work in the assumed conditions. European Centre for the Development of Vocational Training CEDEFOP (2006) believes that soft skills are manifested in the presence of real experience and experience of reflection, i.e. it is necessary to create conditions for them to manifest themselves. Russian scientists, such as Toporovsky (2011, 2014), believe that soft skills are what is needed today for a person to achieve success in the workplace.

Methodology

A competence-based approach has been used to clarify the purpose of the research. The research methods are: theoretical methods – analysis and synthesis, comparison, generalization; empirical methods – study of advanced domestic and international experience. We have analysed a series of monographs and articles devoted to this topic and studied experience headlined today in mass media and special publications.

Results

One of the ways to form new competences is the resource center. The Resource Center is established with a view to ensure high quality of vocational education. The way to achieve this goal in the professional educational organization is to concentrate there unique learning-and-teaching and human resources, as well as materials and equipment, which are destined for mastering the advanced production technologies and training highly skilled workers and specialists for the economy of the Republic of Tatarstan.

The primary objectives of the Resource center's activity are:

- to implement basic professional academic programs (professional modules) in modern industrial production technologies for students of professional educational organisations;
- to provide competency assessment for graduates of professional educational organisations, including tradesman promotion in ranks;
- to implement academic programs of vocational education in modern production technologies for vocational teachers and job training instructors of professional educational organisations;
- to organize vocational training in advanced production technologies for adult population of the Republic of Tatarstan;
- to develop learning and teaching tools;
- to develop professional academic programs in modern production technologies for vocation-oriented professional educational organisations;
- to organise republican contests of professional skills for students and job training instructors, develop competences of WorldSkills International movement in a vocation specific for the Resource Center;
- to conduct evaluation of new training simulators, laboratory equipment, technical teaching aids, instruments, and tools;
- to coordinate the employers' activities in diagnosis of their manpower needs, provide recruiting and consulting, determine training volumes;
- to provide the population with comprehensible statistical and information material, form a library of contemporary technical literature, develop an infocommunication ground in the Internet in order to achieve transparency of the resource center's activity.

A complicated situation observed in the modern economy proves that it is insufficient for modern students to have knowledge in their major only. The necessity to perfect one's skills improving the prospects for favourable terms of employment becomes more and more obvious (Wilson et al., 2011). Furthermore, the graduate's attributes (knowledge, goals and abilities) are very essential at work, as they expand the student's opportunities for further training throughout

their professional life (Harvey et al., 2002). Such qualities of the students sometimes called “soft skills” are especially important, that is why particular attention to the soft skill development should be devoted in curricula (Redoli et al., 2010).

In contrast to hard skills, which can be proven and measured, the soft skills are insensuous and difficult to evaluate quantitatively. Some examples of soft skills include analytical thinking, verbal and written communication, as well as leadership.

It is well known that employers abroad focus more on the soft skills of a specialist than on their professional knowledge, since if an employee has soft skills, he or she will quickly acquire the professional knowledge necessary for work in the workplace.

In scientific literature the soft skills are defined as nontechnical attainments, abilities and traits of character required for functioning in a concrete job environment (Conrad & Leigh, 1999). Moss and Tilly (1996) have defined the soft skills as "attainments, abilities and traits of character referring to the personality, attitude and behavior, not to formal or technical expertise". However, the soft skills are more than simply individual features and aptitudes. Thus, Hurrell (2009) defines the soft skills as "the use of interpersonal and intrapersonal abilities for simplification of the job mastering in various contexts". European Centre for the Development of Vocational Training CEDEFOP (2006) explains that the soft skills depend on context and are attained from abstractive and implicit knowledge supported by one's own real experience and experience of reflexion. Consequently, the development of knowledge and skills in students will require evaluative knowledge and continuing education. Moreover, it is necessary to generate the implicit knowledge by means of general processes involving metacognitive thinking (Seok-young, 2012).

UNESCO (2001) considers the three aspects of professional education: professional education as a component of general education, as training in profession and as a part of lifelong learning, where the soft skills, generic skills and entrepreneurial competencies gain paramount importance. Resource centers can create conditions for increasing the training time for the development of soft and hard skills (Seok-young, 2012). It is obvious that the formation of soft skills should be a priority in the context of professional education and resource centers.

Discussions

The soft skills are important for graduates of professional educational organisations because skills required from graduates by employers rapidly reshape, with the soft skills frequently driving out technical competences. The soft skills play a strategic role in determining success in career of the future graduates, as the latter have skills to solve problems, work in a team, give a critical feedback, motivate colleagues and set an example to the other employees.

The World Health Organisation states that the soft skills are the abilities of adaptive and constructive behaviour, which permits individuals to effectively cope with the rough and tumble of life (2001). In particular, social skills, being among the softest skills, help people to take grounded decisions, solve problems, think critically and creatively, communicate effectively and build healthy relations. Furthermore, individual skills are connected with formation of empirical and implicit knowledge at work. They push people towards the second-order learning (that is, learning through learning). Thanks to these characteristics the soft skills are considered as generic, transferrable, basic or key skills, which can be

applied in diverse organizational and working contexts. They also represent key opportunities, which help to increase competitive advantage at individual, social and national levels (Seok-young, 2012).

It has been proven by now that the job experience gained at work is the characteristic feature distinguishing graduates of professional educational organisations from other graduates. In addition, every educational institution is set to make its graduates not only specialists in certain field, but also mature personalities with a well-balanced education. However, as evidenced in practice, this characteristic finds its reflection in soft, not in hard skills.

According to some researchers, one of the reasons for the failed attempts of the contemporary graduates to find a job lies in the fact that they do not manage to master soft skills, as well as personal and social proactive attitude, which cardinally differ from the equally important specific professional skills (Conrad & Leigh, 1999).

In times past employers used to give their employees training practices in the required soft skills through the system of advanced training, in-house training. Nowadays many employers think that employees themselves are responsible for their acquisition. At the present time graduates who give a good showing in marketing and communicate easily are given higher ratings than those graduates who are lacking these qualities.

Now it can be seen that soft skills are the extremely important component of individual success at work. At the same time, many teachers encounter difficulties, as they do not know how to teach these competences and evaluate their presence. It is evident that personal traits, attitude to work and individual qualities are difficult to evaluate. In practice it can be done through employees and people enjoying trust. According to Lafer (2004): "such traits as discipline, loyalty and punctuality are not the skills, which a person either possesses or lacks; they are the enforcement measures, which he chooses depending on working conditions offered" (p.272) As far as the soft skills are difficult to measure and assess quantitatively, many soft skills are not mastered in professional environment. They are developed through relationships well in advance of the formal education period. Despite this fact, they represent a substantial part of any job, especially professional one (Lafer, 2004).

The Resource Center for professional education is an ideal educational ground, where one can practice alternative ways of communication with people. It permits to ease teaching and transfer of knowledge in an interactive, not in directive form. Due to this, integration of hard skills with soft skills during the student teaching under certain conditions must be introduced into the formal education. However, many educational institutions have not yet realized this fact.

Philpot (2010) claims that there are different aspects of offering soft skills to students in the educational environment. He supposes that group mentors can promote highly professional skills by demanding professional behaviour in the lecture room/laboratory/workshop and simulating the respective interpersonal communication skills together with students and compeers. The latter can be done by elaborating lessons, which involve solving of various problems arising during communication, as well as by using case studies for investigating the impact of ethical conduct and positive / negative attitude. Furthermore he offered mentors to develop effective student group management skills, professionally communicate with students and their parents, provide a timely feedback, always impart a positive attitude towards the group, show respect and dignity when communicating with the students, reward the students for success, and provide them with an opportunity to progress in the fields requiring hard work (Philpot, 2010). One of the essential things here is to determine a list of qualities, which will be in demand with employers, such as punctuality, loyalty and so on. The

question is how to transfer these tenets and dispositions, because we are lacking methodologies and technologies for transferring skills connected with work in diverse contexts. Therefore, it is important that this problem is addressed not only by employers, teachers, but also by the drafters of curricula and state standards.

Conclusion

In such a way, the resource centers can serve not only as the ground for improving professional skills and professional competences, but also as centers for soft skill development (Toporovsky, 2011). The resource centers integrate a powerful potential for professional and personal communication between subjects of professional education. Different types of cooperation between participants of the resource center can be simultaneously organised in it, namely: advanced training for teaching and managerial staff, training process for potential participants of WorldSkills world championships, teaching process for students of secondary vocational education institutions etc. Altogether, this permits to quickly start training in the required majors and introduce new areas of future-proof personal training of staff who are able to promptly respond to changes in production, who possess multifunctional attainments and skills and are well-adapted to rapidly changing labour market conditions. Much-in-demand today is a special, integrative type of worker, who possesses the skills in solving problems, working in a team, giving a critical feedback, motivating colleagues and setting a good example for the rest of the staff, and being an active personality and individuality.

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