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Personnel Management department, NTU «KhPI»**ACTIVIZATION BUSINESS ACTIVITIES THROUGH THE  
DEVELOPMENT OF COMPETENCE-BASED APPROACH**

This study reviews the theory of systems thinking (ST&T) as an important element of human resource development (HRD). The gap between theory and practice ST&T are analyzed. This study recommends that a competence-based approach in the curriculum. Recommendations for updating the system and creative thinking for HRD research and practices are offered.

Це дослідження розглядає теорію системного мислення (ST&T) як важливого напрямку розвитку людських ресурсів (HRD). Проаналізовано розрив між теорією і практикою ST&T. Дане дослідження рекомендує включити компетентнісний підхід в навчальні програми. Пропонуються рекомендації про те, як системне і креативне мислення може стати більш актуальним для HRD досліджень і практик.

Это исследование рассматривает теорию системного мышления (ST&T) как важное направление развития человеческих ресурсов (HRD). Проанализирован разрыв между теорией и практикой ST&T. Данное исследование рекомендует включить компетентностный подход в учебные программы. Предлагаются рекомендации по актуализации системного и креативного мышления для HRD исследований и практик.

**Keywords.** Labour market, Human capital, Systems thinking, Competence, Human resource Development

**Ключові слова.** Ринок праці, Людський капітал, Системне мислення, Компетентність, Розвиток людських ресурсів

**Ключевые слова.** Рынок труда Человеческий капитал, Системное мышление, Компетентность, Развитие человеческих ресурсов

**Introduction.** The disconnect between practice and theory in HRM can be traced to several factors. Such as, lack of «systems thinking» in curriculum in most Universities departments, the dominance of linear approach in most HRM models, and lack of scholarly articulating the implications of systems thinking in HRM practice.

There is, therefore, the need to re-conceptualize HRM in the context of the rise in complexity theories and fully acknowledge that there is a parallel outlook of implementation of systems theory and thinking (ST&T).

In the field of human resource development (HRD) systems theory and thinking (ST&T) is a crucial component of the research and practice in HRM Ardichvili, Hartshorn, Iles, Yolles, Lee, McLagan, Swanson [1, 3, 5, 6, 10].

Gene L. Roth was acknowledged that systems theory has been proposed as a logical starting point for examining HRD [8]. Roth (2004), however, contended that like the field of HRD, lack of consensus regarding the boundaries of ST&T might also influence how HRD professionals may use ST&T in research and practice.

For example, HRM has several systems such as analysis, diagnosis, intervention development, implementation, and evaluation (ADDIE); learning models; action research; planned change; field theory; performance improvement; and learning organization models, for addressing individual and organization change, but has little to show on how the discipline addresses the intricacies of power, politics, and culture in organizations [2].

Consequently, the qualitative profile of the specialist skills must be related to the expectations of the labour market and be the basis of the professionalization of training. The search for answers to this challenge has shown the existing European approach. To adjust the curriculum it is necessary to create a permanent mechanism for monitoring and evaluation of innovative elements of the educational process.

The willingness and ability of universities to develop and maintain a continuous improvement process will depend on the success of graduates in the labour market and, as a consequence, of competitive business.

One of the priority fields of innovative development of Eastern European countries is activation of business activity of population. It is supposed to form the economical pattern of thoughts of students of different specialties paying attention to students who study in Business and Entrepreneurship. Data analysis of the labour market shows that young specialists in Engineering and Computer science are more demanded, less — in Economics. Young specialists of Commerce on the labour market have a level 4.3 points according to 10 point scale.

Specialist study is supposed to acquiring knowledge and skills within the chosen speciality, which are demanded by the labour market. The program of the 1st cycle according to the Lisbon Recognition Convention (1997) has to provide the access to the programs of the 2nd cycle. In accordance with Dublin descriptors of qualifications (March, 2002) it is planned to develop the work skills during the first cycle of study which are necessary for further study that has a higher level of independence as bachelor study is oriented to the further study.

One of the main tasks of the Bologna process is the development of European cooperation in order to elaborate criteria of quality including educational programs. In Eastern European countries, Quality assurance system includes conditions required for achievement of necessary results, control of the quality of the learning process and its results. Students are not involved in the system, and as a rule, involvement of international experts are not used.

Conceptual bases concerning the realization of the competence approach in training specialists using two and three level of education are in the provisions of Sorbonne Declaration and Bologna Declaration, Lisbon Agreement, the St. Petersburg summit «Group of Eight» — »Education for innovative societies in 21st century», National Doctrine of higher education development in Ukraine in 21st century.

Nowadays in Eastern European countries professionalization of higher education requires internationalization programs to provide and develop new tasks of the labour market as well as to ensure entrepreneurial activity of the population.

**Research Aims.** Practice as used in this study encompasses scholarly practice (research and teaching) and practice in terms of working with organizations. However, the apparent lack of applications of systems thinking by HRD practitioners, professionals, researchers, and students raises the question why a theory generally accepted as a foundational theory is not seen in practice and in learning, as it should.

Purpose of study: to compare the current situation and trends in the labor market of engineering occupations Kharkiv region.

In order to implement effective HR, managers need to know other features of their employees too. Data received from the analysis of employees competencies can define as employee weaknesses that may affect the performance of assigned responsibilities so his strong characteristics that are not used in the process of work. In addition, during the competence quality control, employee's potential can be assessed in order to enable them to personnel reserve.

**Results of the research.** The literature review led to the following conclusions. Prahalad and Hamel's introduction of core competencies can be seen as further

contributing to the mainstream popularity of competency-based thinking as well as usefully of organizational strategy within competency models. In contrast to the form of competencies discussed thus far, core competencies exist at the organizational level of analysis and are characteristics that allow an organization to rapidly adapt and innovate [7]. As Schippmann et al. [9] suggest the increased focus on organizational competencies and the increasing speed of changes in the world of business, likely encouraged a parallel increase in interest for individual competencies that could support the development of an organization's strategy and core competencies [4].

Noting the recent trends in the global economy it is possible to point out the impact of scientific and technological progress, innovation vector of development, the accelerated motion of the productive forces in the international labor market, the spread of knowledge and the formation of the international education market, increase efforts to monitor international initiatives, labor migration resources. Consequently, there is an interchange of «material» and «intellectual» factors of production. Thus, assembling of electronic circuits today the primary materials are 2 % of the costs and 98 % go for skilled labor.

Sustainable progressive social-economic development of the country, its leadership position in the external market is ensured by the developed «knowledge generation» environment. The latter is based on the significant sector of fundamental research, availability of effective educational system, developed innovation system as well as state policy directed to the innovation stimulation.

The changes taken place in the sphere of labour and employment, necessity to solve economic problems having the aim to make enterprises competitive and efficient, rapid and adequate response to the changes associated with the development of the new technologies require respective organization of engineering work and, therefore, special attention to higher technical education.

To activate the innovations in the European Union, the potential of innovations should be purposefully developed and effectively used. This is not only a major condition of successful development of the economy in the European Union, but also a major factor influencing the solution of the significant global problems of economic development and technological advance. The importance of the innovation potential in the European Union for economic development and technological advance in the world is determined by the current role of the European Union and its influence on global changes.

In conditions of global competition, human capital is the foundation of investment attractiveness of a country. Rating of investment attractiveness of Ukraine's cities according to the magazine «Investgazeta» was composed as follows: Donetsk, Odessa, Kharkiv, Dnipropetrovsk, Lviv, which are characterized by the highest intellectual component.

The European Union has quite a few ways of using human, financial, material and other resources effectively and purposefully. It coordinates the implementation of innovative projects and aims of producing long-term qualitative changes. EU can be state that a great potential of political decisions and organizational and administrative skills are necessary for achieving synergistic effects.

Results of globalization include the integration of research, the growth of scientific communication and accelerated development of the international labor market. In turn economic development accompanied by increased demand for labor. The labor market is an integral part of the overall economic and market mechanism. It is characterized as one of the most difficult social and economic phenomena of society, which reflected all sides of his life. It shows the whole diversity of interests and contradictions.

Employment in the general population and especially young people has not only economic but also social meaning as a form of adaptation of different social groups to the market.

Adjusting the demand for labor requires analysis of factors that affect it. Increased demand can be achieved by stimulating it through the creation of new permanent or temporary jobs, the development of non-standard forms of employment, direct investment in the creation and renovation jobs.

Human resources potential of an enterprise in a Kharkiv region are presented in Figure 1.

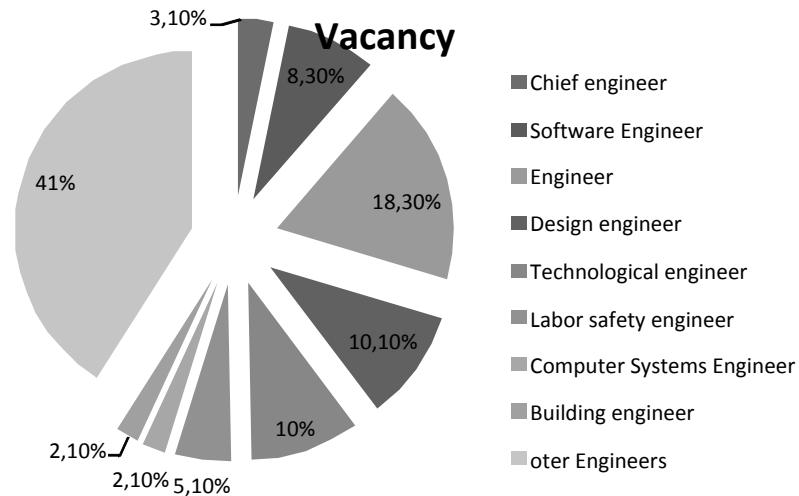


Figure 1. Human resources potential of an enterprise in a Kharkiv region (engineering component)

In order to start the development of measures to improve the competence of technical specialists of the enterprise one must firstly determine what competencies should have priority. For this purpose, a questionnaire among 17 undergraduate of engineering majors was done. Results of the importance of general competencies determination are listed in Figure 2.

So, we can see from the survey that the most important are the following competencies: ethical commitment, research skills, outlook and multiculturalism.

In practice, some companies use only the core competencies, while others develop and use management, and some of them develop a special competence for the job groups of different departments.

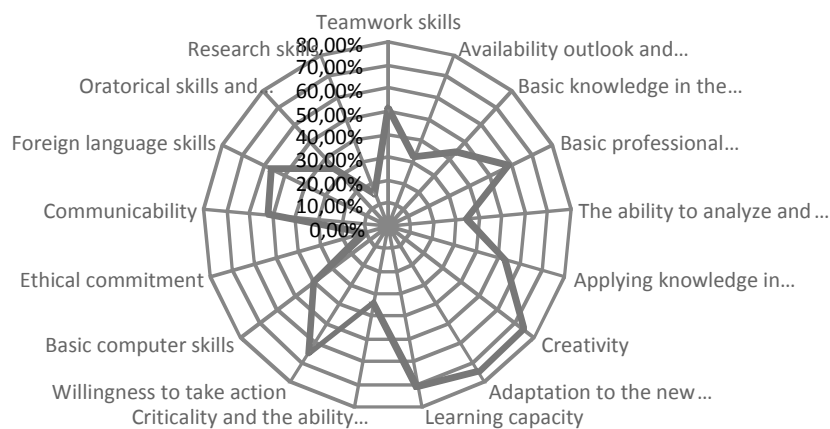


Figure 2. Assessment of the Needs in the social, personal, systems and instrumental competencies

In thus way, classification divides competences on the following groups:

- 1) simple, with a single list of indicators of behavior (standards of knowledge and skills that are observed in the actions of a person of a particular competence);
- 2) detailed ,consists of several levels, the amount of which is determined by the objectives of the competence model of;
- 3) threshold competences include knowledge and behaviors that are required for admission to the performance;
- 4) differential ones contain knowledge and behaviors that distinguish the best staff from the average workers (poor workmen).

The principle of designing an employee reference model has been used during training of qualified specialists. This principle demands a combination of qualitative and quantitative methods of the sociological analysis. The qualitative methods include personal interviews; work with focus groups and mini groups. The quantitative method is carried out in the form of a survey representing information gathered from respondents via questionnaires.

The requirements for the educational standards of higher technical education should be formed by market demand of specialists with a clear list of competencies. Having compared the list of necessary competencies for a specialist in a particular subject area (specialist model) with the list of planned competences of a graduate student in his/her major within the same subject area (graduate model), the partner universities will be able to train specialists who will meet the labour market requirements.

For satisfying the needs of the developing knowledge-based economy is important, that international cooperation would be based on the networks of universities, research institutes, parks of science and technologies, innovation centres, clusters of technologically-oriented organizations.

In order to successfully meet the challenges of a dynamic environment, it is necessary, along with other active skills to develop the students' such skills as independent decision-making, the ability to take risks, development of personal capabilities, internal control, confidence, entrepreneurial skills of the individual. This is due to the need to find innovative ideas and the development of creative and entrepreneurial skills in the current economic situation. Personal-business performance effectively develop throughout life, if they are passed in the learning process interactive/practical way.

At the same time, skills can never be complete because of the complexity of social relations. Social competence suggests an answer to several questions, namely:

- What is distinguished me from others?
- What are my weaknesses and preferences?
- What in me may irritate the other people?

Search for answers to these and other questions helps teamwork, execution of projects tasks, the results of which will be based on successful communication.

We need to develop along with the professional competence also social skills. It should be noted that both directions are amplified and successfully developed with internationalization.

The development of international programs is most effective when focused on students and their faculties. An important component of this type of cooperation is to find areas of common interest as the basis for the establishment of joint programs in various disciplines.

**Conclusions.** Thus, the development of new forms of education makes it possible to improve the quality of education, support and promote cooperation in education, to form an internal education policy, cultural policy, migration and visa policy, trade policy, economic policy.

The formation of the knowledge-based economy requires a change in all the areas of social, economic, political and scientific life of Ukraine. At the same time, creating the knowledge-based society affects the content of the processes of globalization and the situation in the modern world. This scheme combines economy and education and allows students to choose educational trajectory.

Important recommendation is critically review the curriculum engineering to determine the level of ST&T; and how it can reality contribute to research, teaching, and practice of HRD. The social robustness of curriculum will determine the value of knowledge. In addition, how ST&T in HRD can be of practical value. This is the way to place HRD in the forefront of producing 21st-century professionals in leading adaptive change.

The positive experience, which is accumulated during implementation of the TEMPUS project «ICo-op»: Industrial Cooperation and Creative Engineering Education based on Remote Engineering and Virtual Instrumentation (530278-TEMPUS-1-2012-1-DE-TEMPUS-JPHES)» will significantly increase learning efficiency and improve the quality of student's professional training program to the level of international labour market standards and requirements.

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