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Ways to Improve the Competitiveness of Graduates in the Labor Market: the Experience of Japanese Universities

Sposoby poprawy konkurencyjności absolwentów na rynku pracy: doświadczenia uniwersytetów japońskich

Introduction

Nowadays the competitiveness of professionals in the labor market becomes a key index of the effectiveness of any establishment. Educational establishments are no exception. The most prestigious educational institutions are assessed by the indicator of their graduates' competitiveness. In this context, the key issue is to determine the needs of enterprises in the students' skills and which are necessary to improve the competitiveness of graduates in the labor market. Some studies indicate the necessity to acquire, "employment skills" in addition to students' professional knowledge that combine a wide range of skills, such as: implementation of scientific inventions, teamwork, effective communication, etc. The question arises as to the methods of their upbringing among students.

Implementation of special projects

Recently, in many countries, the decreasing competitiveness of university graduates in the labor market is becoming more and more alarming, as indicated in some documents and studies at various levels (Australian Department of Education, 2006; Confederation of British Industries, UNESCO, 2012). In Japan in 2012, the Ministry of Education, Culture, Sports, Science and Technology initiated a 3-year national project “Improving Higher Education for Industrial Needs”, in which 147 universities took part. The main objective of the project was to create a training environment for Japanese universities in order to bring up the innovative qualities of human resources. It was also aimed at increasing the efficiency of the higher education system in developing graduates’ competitiveness by spreading information about challenges and strategies in the labor market among universities and companies. Moreover, determining the needs of industrial enterprises and companies in certain graduates’ skills was one of the main objectives of the project. Some scientists believe that “any discrepancy between what is being taught and the skills needed at the workplace is a problematic issue” (Hiroshi, 2014, p. 2). To solve the problem, the Ministry has supported a special project involving a group of universities in 9 regions of Japan. In September 2012, 23 universities in the central region of Japan were selected for its implementation. Since the beginning of the project, the representatives of the universities met and discussed the challenges associated with the project’s goals and strategies for the implementation. The second industrial university conference was organized to better reflect the goals and results of the project in Nagoya on November 14, 2013 (Hiroshi, 2014, p. 1).

Theoretical framework of the research

In this context, it is necessary to consider the term “employability” or “competitiveness in the labor market”. The term “ability to be employed” is interpreted by different institutions in different ways. Thus, the Confederation of British Industries (2013) defines it as skills and abilities that “help people respond to the demands of constantly changing workplace and make a positive contribution to the success of their employer” (Hiroshi, Nobuo, 2015, p. 82).

The Australian Department of Education, Employment, and Workplace Relations defines them as “non-technical skills necessary for effective interaction at the workplace.” In Japan, the Ministry of Education, Culture, Sports, Science and Technology defines them as “the skills needed for an individual to develop his (her) abilities, for his (her) further socialization and professional independence” (Hiroshi, Nobuo, 2015, p. 83). In Japan, in 2006, the Ministry of Economy, Commerce and Industry (METI 2014) introduced the concept “*syakaijin kstantoku*” (fundamental competencies for employees), and later, in 2008, the Ministry of Education, Culture, Sports, Science and Technology - the concept of “*gakushiryoku*” (competencies of a university graduate) to help students develop their employment skills.

The analyzed materials indicate that the idea of employability skills and abilities necessary for competitiveness in the labor market vary according to different approaches of researchers. For example, the Japanese Ministry of Education, Culture, Sports, Science and Technology calls “employment skills” (“*syugyo ryoku*”) the skills that graduates of the university must have for social and professional independence. Similarly, the Ministry of Economy, Commerce and Industry calls these skills “*syakaijin kencyoku*” - the fundamental skills necessary to work with a diversified contingent of economically active population in the workplace.

Andrews and Russell (2012) and Barrow and Wragg (2012) refer to them: self-management, teamwork, business and customer awareness, communication skills and problem-solving skills. The Harvard Educational Innovation Expert, T. Wagner, identified the “Seven Survival Skills” necessary for students to find a decent job and become an active citizen in a democratic society: critical thinking; cooperation in a professional network; liveliness and adaptation; initiative and entrepreneurship; effective oral and written communication; obtaining and processing of necessary information; interest and imagination.

Identification of employers' demands

According to the researchers (Dyer, Gregersen, Christensen, 2015), there are two types of skills needed for employment: “delivery skills” and “discovery skills.” “Delivery skills” are the abilities to conduct analysis, planning, detail orientation, implementation, disciplined performance. “Discovery skills” are

the abilities to associate, observe, conduct an experiment that are considered necessary for creative innovators. These skills are important for the employees of any company, for its operation and for providing innovations. At the same time, we should stress, that in Japan there is a shortage of human resources with invention skills, and as it is a well known fact, without innovators, the maximum working life of a company is 10 years (Hiroshi, Kawazoe, 2015, p. 82).

Although Japanese companies are traditionally considered as innovative, unfortunately, they are gradually transforming into a company more oriented on “delivery skills” than on “discovery skills” due to the lack of innovation in workers, as recognized by Japanese entrepreneurs. Such well-known Japanese companies as Toyota and Sony are not included in the Forbes rating of the most innovative companies rated by investors. According to Harada (2010), most Japanese companies did not make inventions, they only improved existing Western technologies for the production and sale of goods. Such product upgrades between the processes of production and sales are called “open innovation in value added”.

Japanese companies were even criticized in the West for “theft” of technology in 1980 and were forced to intensify their research and development departments. One of the reasons why Japanese companies lack the skills of discovery and, consequently, innovation is Japanese system of higher education, which, in the first place, requires passive and obedient students. In her work Pazyura (2014) notes that “one of the most important lessons for students in a Japanese school is to study the hierarchy of people relationships - the junior / senior needed to be “sunao” (obedient employee)” (Пазюра, 2014). At the same time, in Japan there is an awareness of what Wagner (2010) writes that “only the work of innovators and entrepreneurs will be immune to outsourcing and automation in the new global knowledge economy” (Hiroshi, Nobuo, 2015).

Establishment of social partnership

In this context, it is necessary to consider what creative and innovative skills should be raised at universities. First of all, these are the research skills that intersect with the definition of “syakaijin kencyoku”, but are more focused on the process of discovery. Forsyth (2007) believes that universities have the benefits of creating an innovative context, a learning environment for research that combines convergent and divergent thinking patterns.

In order students could acquire these skills, the project “Improvement of Higher Education for Industrial Needs” was initiated, focused on improving the quality of teaching and modernization of the learning process through active learning; as well as the strengthening of partnerships between universities, industry, local governments and other social partners. Within the framework of the project, it was useful to conduct joint research by enterprises and educational institutions regarding the necessary skills for graduates. The main Japanese companies called motivation (44.5%), cooperation skills (40.2%), activity (39.6%), as important skills for future employees. Less important, according to the results of the project, were logical thinking (14.7%), critical thinking (7.2%), presentation skills (7.2%), foreign language skills (2.6%), discussion skills (1.7%) (Hiroshi, 2014, p. 4). Regarding the desired skills from the point of view of university representatives, broad vocational knowledge (liberal art) (65.6%), active position (58.1%), polite manners (41.9%), motivation (30.1%) were named. Skills important from the point of view of both sides were motivation, activity, problem solving skills.

Thus, the introduction of social partnership between universities and enterprises is extremely important. Only on conditions of its establishment it is possible to search for an optimal set of skills for graduates of higher educational institutes. Social partnership seems particularly relevant taking into consideration the fact that most faculty members never worked in production. Traditionally, Japanese universities have not only distanced themselves from enterprises, they were even banned from having lecturers in case of having experience in businesses and companies, unlike the United States, where this is the usual practice. So, Columbia Innovative Enterprise in Columbia University was established in the United States at the Harvard Institute of Innovation Lab at Harvard University. In Japan, such practices have never been implemented, and joint projects between universities and companies have limitations. Of course, such isolation negatively affects the quality of students’ training.

Strengthening ties between local governments is also important as many graduates work in local companies or municipal organizations. It is important to integrate the efforts of companies, government agencies and universities. The participation of employers in the educational process, the definition of the scope and objectives of education, the ability to influence the content of training and the development of a curriculum are extremely important. Among the universities that participated in the project, 14 identified that the partnership

between the university and the enterprise was useful. Representatives from universities and industry held joint meetings to discuss the skills needed for future work, universities invited professionals for lectures and special career development courses. In addition, social partnership allowed them to develop an internship.

Establishment of internship for university students

According to the analyzed materials, internship is another way of solving the issue of closer cooperation between enterprises and universities, which has only recently become popular in Japan. According to the Ministry of Economy, Commerce and Industry, more than 70% of universities offer their students an internship, but only 2% enjoy this opportunity. For comparison, in the US, 70% of students are interned. The duration of internship period in Japan is 2 weeks, while in Europe and South America this term is from 1 to 12 months (Пазюра, 2012). Internship was introduced at 11 universities. Some universities, such as the Kanawaza Institute of Technology, practice “hybrid internship,” which means combining work with problem-oriented subjects. The university asks the company or local government to provide students with relevant tasks that have complex problems and students are working on a decision during internship.

Active learning technology

Additional and equally important in the training of employment skills is the use of active learning technology, which enables students to be innovative, and which has begun to gain popularity in Japan. According to Japanese scholars, active learning is considered as one of the important technologies for the development of graduates’ skills. Of the 23 universities in which the research was conducted, 19 institutions indicated the need for an active learning approach. However, this raises the question of the willingness of Japanese teachers to use innovative teaching methods. Not all teachers in Japan can use project-based learning, and this raises the issue of the need for changes in teacher training in new socio-economic conditions, despite the traditional conservatism in Japanese education (Hiroshi, 2014, p. 4).

Drew and Mackie (2011) believe, that “one of the most important reasons for such an interest in active learning is the need for changes in the models of work in the context of the learning society”. Laverie (2006) also believes that an active learning approach is “cultivating workplace skills that employers need: critical thinking, communication skills, leadership skills, creativity, problem solving, completion skills, and teamwork ability”. These skills are identical to what W. Wagner calls “seven survivor’s skills”, as discussed above.

According to scientists Drew and McKee (2011) active learning does not have a universal definition. Green (2011) defines it as learning based on practical experience. Ernst (2011) believes active learning motivates students to participate in the mental process. Agbatogun (2014) describes active learning as a type of activity in which all students in the class take part, and not just watching, listening and recording. According to the definitions of Ernst (2011) and Agbotogun (2014), as long as students take part in education, even lectures and reading (writing) can be considered as a part of the process of active learning. Co-operative learning and problem-based learning are often used for active learning. Perez, Garcia, Muñoz, Alonso, Puche (2014) define co-operative learning as “instructional encouragement for small groups of pupils to work together to maximize learning outcomes”. Despite the drawbacks, such, at the same time, independent and dependent on the group training is popular. Among scholars there is a commonly accepted view that cooperative learning motivates students to participate in the learning process, provides academic success, guarantees students opportunities to work in real-world situations.

The same happens in the process of active learning: students analyze real problems, work in groups and develop research skills. Gokhan (2013) believes that problem-based learning encourages students to research and solve problems in a socially active environment. Hopper (2014) is confident that problem-based learning develops research skills. Therefore, the use of active, co-operative, and problem-oriented learning technologies is essential for the development of research skills, especially in the context of future employment.

One of such courses aimed at developing research skills is Business Planning in Practice at Japanese Universities. It is designed for 14 weekly sessions lasts 100 minutes each. During the course, students study Toyota’s eco-policy, conduct research on the recognition of eco-politicians by the city’s residents, analyze information, and suggest possible solutions. Through the use of active learning technology during the course students acquire research

skills. The course involves lectures conducted by the staff from Toyota, the Japanese marketing departments. Students work in groups for the preparation and implementation of group presentations, studies, awareness of Toyota employees and the development of eco-policy (Hiroshi, Nobuo, 2015, p. 84).

Thus, the issue of increasing the competitiveness of graduates of Japanese universities is relevant and requires immediate consideration. Solving the problem of employment of university graduates in the labor market is possible by introducing social partnership between enterprises and educational institutions, conducting joint projects and research. An important step in this way is to identify the necessary skills that increase the competitiveness of a specialist in the labor market. The introduction of internship, the use of special educational technologies are aimed at developing skills in conducting research, teamwork, effective communication. At the same time, this raises a number of questions regarding adequacy of training of teaching staff and adaptability of higher education institutions to market requirements.

Streszczenie: W artykule omówiono kwestię szans zatrudnienia absolwentów wyższych uczelni w Japonii. Wykazano konieczność nabywania przez studentów umiejętności związanych z zatrudnieniem. Podkreślono istotę pojęcia „zdolności do zatrudnienia” i ich części składowych. Autor analizuje metody, dzięki którym japońskie uniwersytety osiągają cel szkolenia umiejętności. W artykule opisano cel i skalę specjalnego projektu, który odbył się w Japonii w celu szkolenia umiejętności związanych z zatrudnieniem. Wykazano znaczenie partnerstwa społecznego między uniwersytetami a przemysłem i stażami. W tym kontekście aktywna nauka zyskuje popularność i okazała się skuteczna w motywowaniu uczniów do aktywności poznawczej.

Słowa kluczowe: zdolność do zatrudnienia, partnerstwo społeczne, staż, aktywne uczenie się, uniwersytet, przemysł

Abstract: The article deals with the question of university graduates' employability in Japan. The necessity of acquisition of employability skills by students has been proved. The essence of the notion "employability skills" and their component parts have been revealed. The author analyzes methods with the help of which Japanese Universities achieve the goal of training the skills. The article describes the aim and scale of special Project, held in Japan for training employability skills. The importance of social

partnership between universities and industry and internship has been shown. In this context active learning has been gaining its popularity and proved to be successful in motivating students to cognitive activity.

Keywords: employability skills, social partnership, internship, active learning, university, industry

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