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USING THE HACKATON ECOSYSTEM FOR YOUTH EMPLOYMENT FORESIGHT: SCALE, STRUCTURE AND FUNCTIONS

This article is an attempt to explore the opportunities of using the Hackathon ecosystem tools to perform a quality forecasting of a wide range of youth employment issues. It is observed that despite vast experience of psychological training in higher education institutions based on the transformation of self-awareness, shaping professional perceptions related to changes in professional knowledge of professional occupation as it is, its object, professional community, etc., modern University realia lack targeted management efforts towards developing job-related skills as well as comprehensive assessment of their changing trends in the process of professional enhancement of students' self-consciousness. At best, specific good practice of individual specialists is used, often without its interpretation by teachers and psychologists and beyond the scope of systemic analysis of the research issues. All this challenges an impetus to further studies on developing professional self-awareness of future specialists and encourages active implementation of the Hackathon ecosystem tools to render a foresight on youth secondary employment and self-employment at the level of University as well as in a regional setting. To attain the research agenda, the study employed the following general and special research methods: a system analysis method, an analytical grouping technique, comparative analysis, and dynamic and graph series construction. To summarise the research outcomes and to prepare a proposal draft on the opportunities to use the Hackathon ecosystem for offering a foresight on youth secondary employment and self-employment, the methods of abstract logical analysis and content analysis were used. Kyiv National University of Technologies and Design was chosen as the basis for this study. A questionnaire was chosen as a method of sociological research on student secondary employment. As a research toolkit, two questionnaires were developed: for students and for graduates. The study suggests using the Hackathon ecosystem to perform a foresight on student secondary employment and self-employment as a model to promote professional socialization of Ukrainian youth. According to the research findings, it is argued that there are three trajectories of student secondary employment: spontaneously formed (a good high paying job offered by chance), planned (targeted search for secondary employment according to the study major to gain professional competencies and work experience) and forced (employment to improve or maintain financial and economic well-being, usually beyond the education profile). An emphasis is put that secondary employment for Ukrainian students is not only the way to gain work experience and an extra pay opportunity but also an instrument of student professionalization. It is concluded that the terms and nature of secondary employment affect the professionalization effectiveness where gaining work experience, building professional contacts and employment prospects after graduation are viewed as a benefit for a wider student youth involvement in secondary employment.

Keywords: *Hackathon ecosystem; Foresight; student youth secondary employment and self-employment; university.*

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ВИКОРИСТАННЯ ХАКАТОН-ЕКОСИСТЕМИ ДЛЯ ФОРСАЙТУ ЗАЙНЯТОСТІ МОЛОДІ: МАСШТАБИ, СТРУКТУРА ТА ФУНКЦІЇ

Ця стаття є спробою дослідити можливості застосування інструментів Хакатон-екосистеми для якісного прогнозування широкого спектру проблем зайнятості молоді. Зазначається, що попри суттєвий досвід психологічної підготовки фахівців у закладах вищої освіти, який базується на обліку трансформації самосвідомості, зокрема, на становленні професійних уявлень, пов'язаних з видозмінами професійних знань про саму професійну діяльність, її об'єкт, професійне співтовариство тощо, у сучасній реальності системи вищої освіти цілеспрямованого управління розвитком професійних уявлень, детального оцінювання векторів їх змін у процесі професійного становлення самосвідомості суб'єкта діяльності практично не здійснюється. У кращому разі – використовується конкретний досвід окремих фахівців, часто без його інтерпретації педагогами та психологами, поза системним аналізом проблем. Все це надає вивченню особливостей формування професійної самосвідомості майбутнього спеціаліста особливої актуальності, стимулює використання Хакатон-екосистеми для здійснення форсайту вторинної зайнятості та самозайнятості молоді в масштабах як окремого вишу, так і регіону. У процесі дослідження та вирішенні поставлених завдань застосовувалися такі загальнонаукові та спеціальні методи досліджень: метод системного аналізу, метод аналітичного групування, порівняльного аналізу, побудови динамічних та графічних рядів. Для узагальнення результатів дослідження та підготовки пропозицій щодо використання Хакатон-екосистеми для форсайту вторинної зайнятості та самозайнятості молоді застосовано методи абстрактно-логічного аналізу та контент-аналізу. Як базу дослідження було обрано Київський національний університет технологій та дизайну. Методом соціологічного дослідження вторинної зайнятості студентської молоді обрано анкетне опитування. Як інструментарій дослідження було розроблено дві анкети: для студентів та для випускників. Запропоновано використання Хакатон-екосистеми для форсайту вторинної зайнятості та самозайнятості студентів як моделі стимулювання професійної соціалізації української молоді. За результатами дослідження, визначено, що умовно можна виділити три траєкторії розвитку вторинної зайнятості студентів: спонтанно сформована (випадково запропонували хорошу роботу з високим рівнем оплати), запланована (цілеспрямований пошук вторинної зайнятості переважно за спеціальностями, що отримуються у ЗВО, з метою розвитку професійних компетентностей та набуття досвіду) і вимушена (зайнятість для поліпшення або підтримання фінансово-економічного благополуччя, як правило, не за профілем отримуваної освіти). Підкреслюється, що вторинна зайнятість для українських студентів – це не лише здобуття досвіду роботи та можливість додаткового заробітку, а ще й етап професіоналізації студентства. Резюмується, що умови та характер вторинної зайнятості відбиваються на результативності професіоналізації, де здобуття досвіду роботи, встановлення професійних контактів та перспектива працевлаштування після закінчення університету розглядаються як перевага від залучення студентської молоді до вторинної зайнятості.

Ключові слова: Хакатон-екосистема; форсайт; вторинна зайнятість та самозайнятість студентської молоді; університет.

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ИСПОЛЬЗОВАНИЕ ХАКАТОН-ЭКОСИСТЕМЫ ДЛЯ ФОРСАЙТА ЗАНЯТОСТИ МОЛОДЁЖИ: МАСШТАБЫ, СТРУКТУРА И ФУНКЦИИ

Эта статья является попыткой исследовать возможности применения инструментов Хакатон-экосистемы для качественного прогнозирования широкого спектра проблем занятости молодёжи. Отмечается, что несмотря на существенный опыт психологической подготовки специалистов в учреждениях высшего образования, основанной на учёте трансформаций самосознания, в частности, на становлении профессиональных представлений, связанных с видоизменениями профессиональных знаний о самой профессиональной деятельности, её объекте, профессиональном сообществе и т.д., в современных реалиях системы высшего образования целенаправленного управления развитием профессиональных представлений, детальной оценки векторов их конфигураций в процессе профессионального становления самосознания субъекта деятельности фактически не осуществляется. В лучшем случае используется конкретный опыт отдельных специалистов, часто без его интерпретации педагогами и психологами, вне системного анализа проблем. Все это придаёт изучению особенностей формирования профессионального самосознания будущего специалиста особой актуальности, стимулирует использование Хакатон-экосистемы для осуществления форсайта вторичной занятости и самозанятости молодёжи в масштабах как отдельного вуза, так и региона. В процессе исследования и решения поставленных задач применялись следующие общенаучные и специальные методы исследований: метод системного анализа, метод аналитической группировки, сравнительного анализа, построения динамических и графических рядов. Для обобщения результатов исследования и подготовки предложений по использованию Хакатон-экосистемы для форсайта вторичной занятости и самозанятости молодёжи применены методы абстрактно-логического анализа и контент-анализа. В качестве базы исследования был выбран Киевский национальный университет технологий и дизайна. Методом социологического исследования вторичной занятости студенческой молодёжи избран анкетный опрос. В качестве инструментария исследования были разработаны две анкеты: для студентов и для выпускников. Предложено использование Хакатон-экосистемы для форсайта вторичной занятости и самозанятости студентов как модели стимулирования профессиональной социализации украинской молодёжи. По результатам исследования, определено, что условно можно выделить три траектории развития вторичной занятости студентов: спонтанно сформированная (случайно предложенная хорошая работа с высоким уровнем оплаты), запланированная (целенаправленный поиск вторичной занятости преимущественно по специальностям, получаемым в вузе, с целью развития профессиональных компетентностей и приобретение опыта) и вынужденная (занятость для улучшения или поддержания финансово-экономического благополучия, как правило, не по профилю получаемого образования). Подчёркивается, что вторичная занятость для украинских студентов – это не только получение опыта работы и возможность дополнительного заработка, но и этап профессионализации студенчества. Резюмируется, что условия и характер вторичной занятости отражаются на результативности профессионализации, где получение опыта работы, установление профессиональных контактов и перспектива трудоустройства после окончания университета рассматриваются как преимущество от привлечения студенческой молодёжи к вторичной занятости.

Ключевые слова: Хакатон-экосистема; форсайт; вторичная занятость и самозанятость студенческой молодёжи; университет.

Introduction. The urgent need of any developed society is the improvement of labor potential of the state, formation of competent and effective professional, capable of high productivity and performance, as well as competition on internal and external labor market (A. Stoltzfus, M. Rosenberg, H. Lapp) [1]. Professional formation and integration of youth into socio-professional community (N. Linnell, S. Figueira, N. Chintala) are of interest as a systemic phenomenon requiring multifaceted and interdisciplinary study [2]. The reproduction of the experience accumulated by generations and the actualization of the modern achievements of science and technology require a special approach (D. Groen, B. Calderhead) to the professionalization of personality, in which the process of becoming a professional is organically included in the process of human socialization [3]. Nowadays, from the point of view of I. Gryshchenko, it is impossible to imagine a mature personality without its professional component [4]. Relevance of the problem of student youth employment, according to T. Zhurko, is directly related to the socio-economic development of modern Ukraine [5]. In most countries (W. Taylor) there are crisis phenomena, which are characterized by a decrease in the standard of living of the majority of the population, an increase in unemployment, an increase in prices [6]. Students are forced to turn (J. Yao, H. Li, D. Shang, L. Ding) to additional earnings in conditions of extremely low scholarships [7], reduction in the number of budget places (G. Yildizer) and the spread of paid education [8].

Effective integration of a young specialist into socio-professional environment (G. Lopatenko) is accompanied by the fullest disclosure of his/her potential, successful self-realization and self-actualization in labor activity [9]. Successful work in the chosen specialty (V. Scherbak, S. Arabuli) promotes the image of a professional, increases labor satisfaction, forms the image of a specialist [10]. The guarantee of successful integration of a young specialist (N. Krakhmalova) is the ability to labor adaptation and readiness for self-realization in the workplace formed in a professional educational institution [11].

The main problem of our study is the contradiction between the necessity of effective integration of a young specialist into the socio-professional environment (I. Goncharenko) and the current attitudes of young people in the sphere of professionalization [12]. The object of the present study (L. Hanushchak-Yefimenko) was the process of personal professionalization, the peculiarities of youth integration into socio-professional environment were singled out as the object of research [13].

The purpose of this article is to propose a model for the use of the Hackathon Ecosystem for the Foresight of Secondary Employment and Self-Employment of Youth, to define its scope, structure and inherent functions. Materials for the Youth Secondary Employment and Self-Employment Foresight were collected and adapted at the Kyiv National University of Technologies and Design (KNUTD) in 2021.

Materials and methods. General scientific and special research methods were used during the research and the solution of the tasks. The method of system analysis was used to study the normative-legal base. Statistical methods were used to obtain structural characteristics of non-standard employment: analytical grouping, comparative analysis, construction of dynamic and graphical series. Methods of abstract-logical analysis and content analysis were used to summarize the results of the study and to prepare proposals for the use of the Hackathon ecosystem for the Foresight of secondary employment and self-employment of young people.

Results and discussion. The key indicator of inclusion in the socio-professional environment and professional self-determination is a young person's achievement of a certain socio-professional status, which may or may not satisfy a person depending on the scale of his or her aspirations.

Therefore, the subjective indicator of the level of self-determination – the degree of satisfaction with the currently achieved socio-professional status – occupies an important place here.

Professional self-determination, like any other type of personal self-determination, is characterized by three components: self-knowledge (cognitive aspect), self-evaluation (affective aspect), and self-development (conative aspect). That is, in the process of training and the initial stages of professional activity a young person learns his/her peculiarities, identifies inherent qualities that will contribute to successful professional self-realization (professionally important qualities). In the process of mutual adaptation of a profession and a person, there is a process of self-assessment, correlation of oneself with other employees and colleagues. As a result of this process an image of a professional emerges, areas of successful application of forces are determined, and an idea of those properties and qualities that need to be developed for successful professionalization is formed.

If we consider the process of entering the profession as an element of personality socialization, then at this stage of ontogenesis the future professional should pass three stages in his/her development (N. Krakhmalova): adaptation to social and professional environment, individualization in it and integration into professional community. In order to reveal the peculiarities of a person's entry into the socio-professional environment, we conducted a study on a sample of young people from Kyiv region. The study involved 348 people aged from 18 to 23 years. The sample was balanced by sex and included both university and college students and working youth. Questionnaire and testing (by the method of I. Gryshchenko) were used as empirical methods.

The results of the empirical study showed that the inclination to constant self-knowledge, interest in themselves is characteristic of 62.67% of the respondents; 37.33% believe that self-knowledge can have harmful consequences for a person, as it often turns into self-digging. Professional reflection is one of the mechanisms of successful adaptation and integration of a person into socio-professional community, because it allows a person to look at himself/herself from outside, to assess himself/herself through the eyes of others, to form a perspective plan of development taking into account own merits and demerits. The absence of professional reflection can testify either to insufficient motivation of labor activity of an individual or to problems of personal reflection as a whole that are the factors complicating or even preventing a young person to enter professional activity.

At the same time, the analysis of the questionnaire data showed that the problem of self-development and self-improvement constantly worries 77.77% of the subjects of the studied sample; 22.23% do not care about their development. In combination with the aspect of professional self-knowledge, the following combinations are interesting:

1) self-knowledge + self-development (59.55%) – the most effective professional position, which allows to harmonize personality and profession, effectively pass all stages of labor adaptation and socialization;

2) self-knowledge + self-development (2.43%) – passive perception of own merits and shortcomings, often a consequence of overestimated self-esteem and egoism. Such a young person is likely to change jobs if he/she is not satisfied with anything, instead of overcoming temporary difficulties to improve his/her level of competence;

3) lack of interest in knowing oneself + self-development (18,38%) – lack of reflection, which leads to mechanical accumulation, "collecting" of professional skills without regard to their own interests and aptitudes;

4) lack of both professional self-knowledge and self-development (19,55%) – infantile position, which does not allow a person to successfully adapt and integrate into professional environment.

Thus, we can talk about the prerequisites for successful entry into the professional environment in only about 8% of young people. However, the process of professionalization is not limited only to the aspects of self-knowledge, self-assessment and self-development. There are also professional motivation, factors of the social environment, inter-group and intra-group peculiarities of professional teams. The key to successful professionalization is practice-oriented approach to training specialists, the aim of which is to form professional, general cultural, as well as socially important competencies of students through the acquisition of knowledge, abilities, skills and activity experience.

The problem of secondary employment of student youth is common among students at all universities in Ukraine. KNUTD was chosen as the research base. The method of sociological research was a questionnaire survey. As research tools were developed two questionnaires: for students and for graduates. The purpose of the first questionnaire was to identify the characteristics of the secondary employment of students and to determine its impact on the future employment of students. The second questionnaire was designed for university graduates and aimed to find out from them whether they worked during their student years and how it helped them in their future employment. A total of 475 people participated in the survey, including 274 students and 200 graduates. The sampling population for students is quota, representative, defined by sex, age and course of study, and as for graduates - random and unrepresentative.

The results of the student population survey revealed that 40% of the respondents were working and the remaining 60% were not working. When compared to the data obtained a year earlier using a similar methodology, the number of working students increased by almost 10%. This trend demonstrates the demand for employment among students. 66.6% of graduates responded that they worked during their studies. This indicates the relevance of work activities during the period of students both in the past and in the present.

Next, we were able to find out what occupations are in demand and most common among working students. When asked, "What do you work as?" – 14% of respondents said waiters. Freelancers are 12%. Other occupations such as salesperson, animator, nurse, cook, manicurist, and even deputy assistant were also named. It is noteworthy that most students do not work in the specialty received in the university, indicating a situational approach to employment and the desire to earn money, rather than to acquire professional and practical experience in the chosen profession in the university. A similar opinion is held by university graduates: 71.4% of respondents said that they had worked in a field other than their specialty during their studies at the university. However, of all the graduates who participated in the survey, 61.9% responded that they currently work in their specialty.

The degree of demand for the chosen profession is also of key importance for each student, as it is connected with the future professional activity, with the opportunity to earn, to contribute to the production of socially useful product. We have revealed that only a small part of students (9.1%) consider their future profession to be fully demanded. Rather, 36.4% of the respondents find it in high demand, 31.8% find it rather in high demand, and 18.2% of the respondents find it rather unrequited than in high demand. 4.5% of students call their profession unclaimed (Figure 1).

A separate block of the study was devoted to identifying the reasons that motivated students to work. The results of the questionnaire showed that 40.5% of respondents want to have pocket money, the same number want to be financially independent from their parents. The remaining 19% of students gave such answers as the need to pay for education, gaining skills and work experience.

According to analytical forecasts in the near future in Ukraine will develop agribusiness and IT-sector. According to forecasts of EY the most active international investments are observed in communication, pharmaceutical industry and food production. According to the results of the analytical report on professional-qualification forecast in 2020, the level of employment in industry

is expected to increase (by 19.1%) from 2022 to 2025, while in construction it will remain almost unchanged (by 1.1%) and in professional and scientific-technical activities will decrease by 15.6%. Some increase in the overall level of demand can be seen for food production workers, craftsmen, production equipment maintenance workers, assemblers, basic home and outdoor service occupations, and for basic agricultural occupations.

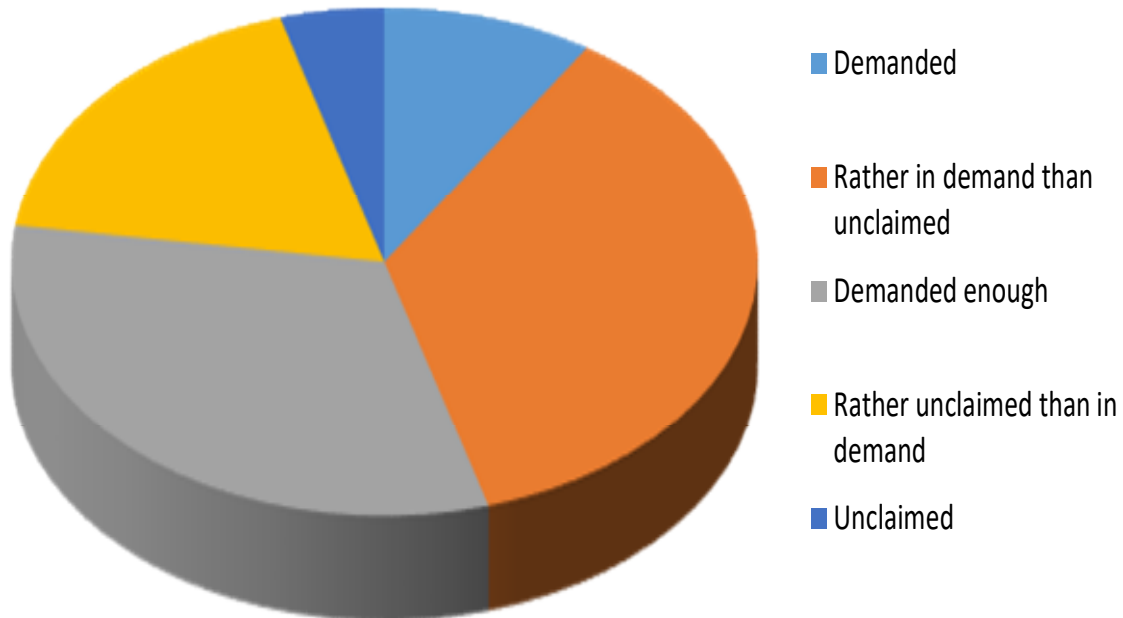
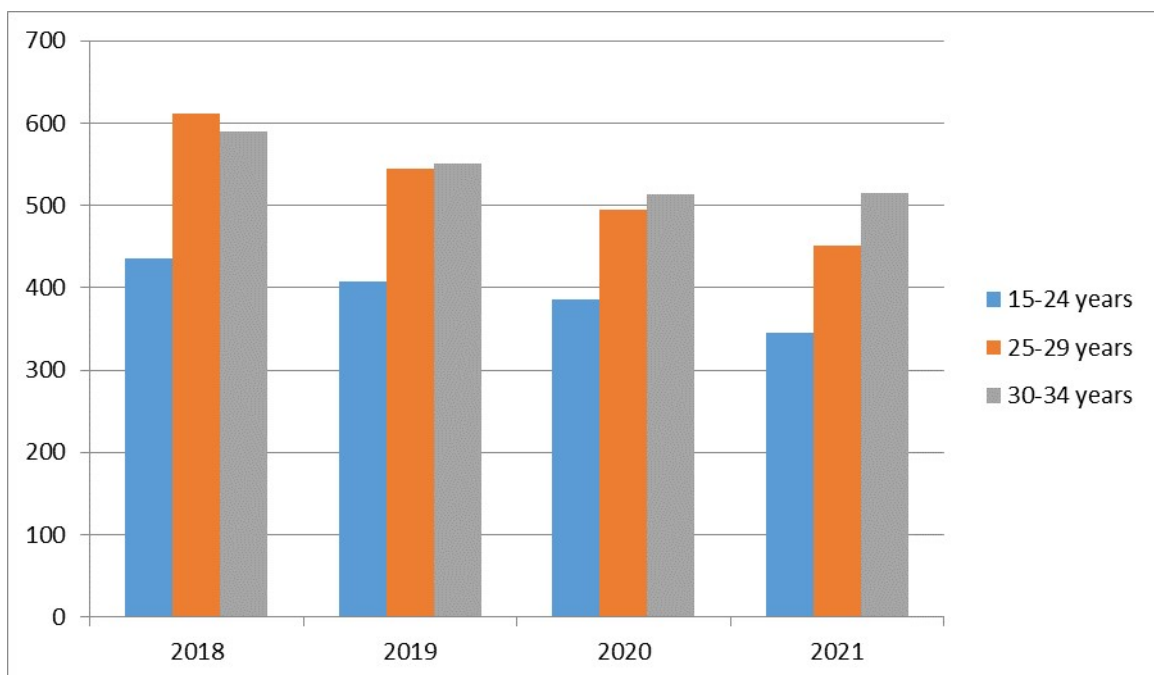


Fig. 1. Distribution of students' opinions on the demand for their future profession, %



Source: data from the State Statistics Service of Ukraine.

Fig. 2. Dynamics of informally employed youth in 2018–2021, thousand people

Labor market supply expectations differ significantly from projected demand. The overall level of labor market supply is expected to shift from lower education levels to "higher" and

"higher" qualification levels. Regarding qualifications, the highest level of growth in labor supply is projected for the groups "Information Technology" – the highest (+10.9%), "Law" – the highest (+6.2%), "Social and behavioral sciences, social work" – the highest (+3.4%). The most significant decrease is supposed for qualification groups "Chemical industry and biotechnologies" – average (-17,3%), "Humanities, culture and art, journalism" – average (-16,1%), "Education" – high (- 12,0%). In other words, young people considered IT sphere (55.7%), legal (38.7%) and banking (33.5%) the most prestigious for choosing a career. Less prestigious were the medical sector (25.9%), public sector (20.5%), agribusiness (14.3%), journalism (14.0%), education (7.0%), etc. The number of those employed in the informal sector of the economy was greater among the older age groups of young people (Figure 2).

Fig. 2 shows that the lack of professional experience, material problems, and psychological discomfort due to the lack of work encourage young people to engage in unregulated activities. According to official data of the State Statistics Service of Ukraine, in 2021 the number of young people who worked in informal jobs was 1.3 million or 37.0% of the total employed population aged 15–70 years (in 2020 – 1.4 million, in 2019 – 1.65 million).

Conclusion. The results of our study show the interest of university graduates in the subject of their future employment. The beginning of labor activity begins earlier for students in the 3rd-4th years of study. Ukrainian graduates are motivated mainly by material factors, the possibility to earn for themselves and their families, i.e. the consideration of labor as a means of achieving material well-being prevails. For this purpose, young people will have to find a job in a difficult situation on the labor market, sacrificing their professional expectations and orientations. We conclude that there is no significant difference between representatives of different regions in their answers about their vision of labor, future workplace, and employment experience. Of course, in today's conditions young people have to adapt, realizing high labor mobility. Willingness to engage in rewarding work, to work hard for material well-being is important, regardless of whether the nature of the future employment field coincides with the received specialty. In addition, readiness to change professional activity, the emergence of various non-traditional, non-standard forms of employment in the labor market (temporary, non-standard employment, which will allow combining work and training).

References

Література

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