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## EDUCATION TOWARDS THE REQUIREMENTS OF THE LABOUR MARKET

### Summary

The publication presents the problems of contemporary education against the background of the requirements of the external labor market. Essential aspects of education and the labor market were presented, using the results of secondary research cited from various reports. As a research method, literature analysis and a research tool in the form of a survey questionnaire were used. The theoretical part was developed on the basis of selected literature on the subject and analysis of reports. The empirical part contains the results of primary research carried out on a purposefully selected sample of respondents. In the presentation of the obtained research results, a description of the basic research results was used.

**Keywords:** education, work, labour market.

### EDUKACJA WOBEC WYMAGAŃ RYNKU PRACY

### Streszczenie

Publikacja prezentuje problemy współczesnej edukacji na tle wymagań zewnętrznego rynku pracy. Przedstawiono w niej zasadnicze aspekty edukacji i rynku pracy, posiłkując się wynikami badań wtórnych przywołanych z różnych raportów. Jako metodę badawczą zastosowano analizę literaturową i narzędzie badawcze w postaci kwestionariusza ankiety. Część teoretyczną opracowano na podstawie wybranej literatury przedmiotu oraz analizy raportów. W części empirycznej zamieszczono wyniki badań pierwotnych, zrealizowanych na celowo dobranej próbie respondentów. W prezentacji uzyskanych rezultatów badawczych zastosowano opis podstawowych wyników badań.

**Słowa kluczowe:** edukacja, praca, rynek pracy.

### Introduction

Labour market conditions are shifting perpetually. Currently, the labour market expects employees to be educated in the field of multi-skilling and mobility, which is associated with having appropriate skills to perform various tasks (Myjak, Myjak, 2016). The significance of knowledge and the processes leading to developing and applying knowledge is increasing (Mikuła, 2018). Numerous employers are on the lookout for employees who understand the necessity of functioning in the technical world and are able to efficiently utilize technological tools (Andrzejewska, 2018). Personalized knowledge of employees becomes valuable just as much as improving employee's skills, a complex

process in on itself. Therefore enterprise educational programs should encompass not only training, but also education of employees. By combining elements of training and education the training policy of an enterprise may lead to increase in competitiveness and efficiency of its operations (Kozłowski, 2023), e.g. through procedures and activities aimed at supporting the learning of all members of the organization (Zacłona, 2019). Training contributes to the growth of employee qualifications and, as a result, to maintaining or improving the work performance standards, promotes improved and faster implementation of new techniques and technologies, enables better flexibility in managing human resources and, above all, influences employee's commitment and motivation (Kmiotek, Lewicka, 2006). Thus adults will be motivated to learn the most if they will be convinced that they are able to learn new content and that learning will aid them in solving real problems that constitute a significant obstacle for them, e.g. in their professional life (Chabior, 2021).

The modern labour market demands from university graduates to possess a diverse set of skills and to be creative. Graduates with a good command of foreign languages, who have completed internships in renowned companies and have specific achievements exceeding the curriculum are greatly valued. Currently memorizing rules and definitions in order to obtain a good education is not enough. Using EU projects' funding universities are making efforts to create modern laboratories, which will enable universities to launch competitive study programmes (Szmidt, 2014). It is being indicated that in the context of the labour market circumstances regarding opportunities and threats young people, students and university graduates, find themselves in a specific situation and that their vision of the professional future, also on the labour market, is defined (Bartkowiak, 2014).

This paper was created on the basis of a review of the subject literature. Research reports were also utilized. The cognitive goal of this paper is to attempt to demonstrate the connections between education and the labour market. The research objective is to identify the perception of the labour market and education in the context of contemporary requirements regarding the future.

## **1. The essence of connections between education and the labour market**

Education and the labour market are connected through a vast network of educational and professional relations. Participants in the education system transfer into the labour market, but participants in the labour market can also benefit from the education system by improving their qualifications or competences. In this manner participants in the labour market expand their knowledge and improve their skills. Graduates begin their professional activity either by working (employment) or by being unemployed. At times their educational activity turns into passivity, both in regards to education and professional work (Ambroży, 2012). Work is a fundamental activity in the life of every person. Education is undeniably the period of preparation for performance of work. Apart from human development education is also responsible for obtaining necessary knowledge and acquiring skills to be used in professional work (Rogowski, 2022). Education has a general developmental and utilitarian dimension and the completion of higher education is considered as a crowning achievement of education. The motives for undertaking education at this level vary; the most commonly indicated reasons include increasing the chances of finding a good job, pursuing one's passions or interests, and the desire or need to continue learning (Rogowski, 2022). Education becomes a service

like any other and is subject to similar market laws (Karoń, 2022). In education, it is not only important to prepare a person for working in a chosen professional field, but also to equip people with the necessary qualifications and competences enabling professional mobility and adaptation to the changing demands of the labour market. It is also important to be aware of the need, or even the necessity, of lifelong learning and implementing this process (Ambroży, 2012).

Rapid changes in the labour market lead to the emergence of a global knowledge society and development of new tasks for the education system concerning the need to improve the conditions under which university graduates enter the labour market. Meeting this challenge requires combining the development of young people's skills with creating opportunities for young people to gain experience (including international experience) at the stage of higher education. The involvement of social partners and external stakeholders, as well as systematic monitoring of the labour market is also of major importance (Zapotoczna, 2021). Currently numerous universities offer e-learning degree programs and the concept of e-learning is becoming increasingly popular (Goyal, 2012). The subject literature draws attention to the fact that in the digital era the digital world in conjunction with the idea and mechanism of globalization will change the human world into an increasingly universal, structural and largely controllable world. Claims are also being made that in the culture of cyberspace the most creative, frequently extremely subversive ideas play a crucial role; this fact is also related to the emergence of digital culture of education across the world (Jędrzejko, 2014). Artificial intelligence, which becomes increasingly embedded in the professional sphere, is an example of this phenomenon which is why it is crucial to prepare students in a manner which will enable them to thrive in a future dominated by artificial intelligence and keep pace with technological progress in the labour market (Grassini, 2023). This is important because significant changes on the European labour market are expected in the coming years, including changes in the following areas (*Employment and Social Developments in Europe 2013*, 2014):

- the demand for improving qualifications and skills in technical professions and managerial positions;
- greater synergy between professional profiles;
- greater turnover within and between companies;
- increased levels of pressure and stress at work;
- increased job insecurity;
- increasing automation of employee groups, increasing the scope of their responsibility;
- shortening periods of unemployment;
- new ways of effective employee engagement and social dialogue;
- increased uncertainty regarding maintaining a job with simultaneous increase regarding the certainty of employment throughout life.

The modern labour market operates on the principle of competition, where on one hand employers compete to attract and retain employees who are effective in developing the organization's activities and bring profits, and on the other hand employees compete with each other in order to obtain or maintain a job position (Serena, 2016). Therefore employees must systematically expand their knowledge and skills to meet rapidly changing job requirements (Miś, 2016).

## 2. Reports review

*Rynek pracy, edukacja, kompetencje. Aktualne trendy i wyniki badań [Labor market, education, competences. Current trends and research results]* Report (2024) demonstrates that better cooperation between the education system and the broadly understood labour market is necessary so that young people starting their professional life are better prepared for the tasks awaiting them, and that an employer draws satisfaction and benefits from acquiring competent employees. The *Młodzi Polacy na rynku pracy [Young Poles on the Labor Market]* study (2021) shows that prior to taking up employment, young people thoroughly examine their future employer to such an extent as to pay attention to the good opinion of their friends regarding the employer, e.g. that the employer cares about the good induction of a new employee, and not the fact that specific companies use chatbots or cooperate with bloggers. Transparent communication regarding remuneration for work and a wide range of benefits are also important for young people. Moreover, young people appreciate the fact that the employer attempts to actively reach out to young talents by conducting training, workshops or online meetings, supporting student organizations and demonstrating its approachability during job fairs.

*Przyszłość edukacji. Scenariusze 2046 [The Future of Education. Scenarios for 2046]* report (2021) compiled by in future institute in cooperation with Collegium da Vinci, shows that in order to prepare for future changes the system of education should start developing different options for the future. The *Kompetencje przyszłości: jak je kształtować w elastycznym ekosystemie edukacyjnym [Competencies of the future: how to develop them in a flexible educational ecosystem?]* report (2021) provides information that from a future perspective, competencies that distinguish human work from the work of IT systems, robots or artificial intelligence are becoming crucial and that in these areas, humans will still be difficult to replace. The above-mentioned *Przyszłość edukacji. Scenariusze 2046 [The Future of Education. Scenarios for 2046]* report (2021) specifies that contemporary education systems face a major challenge in preparing young people for an unknown future in times of the most dynamic changes in human history. That is social, environmental, economic, regulatory, legal and technological changes. Technological changes in particular seem to bear the most significance for the shape of future education. This applies in particular to robotization and automation, a kind of "technological tsunami", which translates into the need for constant adaptation to new digital tools, as well as the algorithmization of life and work. A similar sentiments can be uncovered in the *Aktywni + Przyszłość rynku pracy [The Active + The Future of the Labour Market]* Gumtree 2017 Report (2017), which demonstrates that a sizeable proportion of Poles (83%) believe that new technologies are the key to success on the labour market. The report also indicates that in the coming years automation, digitalization and related phenomena will fundamentally change the definition of work. Therefore, investments in people and their capital are not without significance, as evidenced by the *The future of skills employment in 2030* Report (2017), which claims that investments in employee's skills must remain at the heart of any long-term company strategy aimed at adapting to structural changes. It is worth mentioning that the *Labor Market Barometer 2024* (2024) informs that the labour market situation remains stable in terms of employers' decisions to increase employment, but this is done at the cost limiting new investments within enterprises.

### 3. The research methodology

The research regarding education and the labour market was conducted in the fall of 2023. The research was quantitative in nature. The research employed a survey technique using an original survey questionnaire, which was distributed in electronic form. The choice of the research tool corresponded to the adopted research conceptualization. The research tool consisted of two parts. The first, theoretical part concerned obtaining from respondents the information related to education and the labour market. The second, empirical part was concerned with obtaining information characterizing the respondents, i.e. gender and specific field of study. Under the research process enterprises (where the respondents worked) were also identified and divided in respect to: their size measured by the number of employees, type of business activity conducted and the scope of operations of the enterprises.

139 respondents were surveyed under assumption that this number will ensure the credibility of the obtained results. The research sample was selected consistently with the research assumptions (the author wished to survey over 100 working students who have professional experience gained in various sectors of the economy and who are also simultaneously studying). The analysis of the research results was performed on a purposive sample of respondents and contains basic statistics in the form of the number of responses.

Two research theses were established:

T1: Education supported by electronic teaching aids is becoming a necessary condition for effective teaching.

T2: The new labour market requires preparing a lifelong learning strategy for all labour market participants.

The two research theses were verified in a descriptive manner, without the use of statistical indicators, which was the author's intention and which can be treated as a prelude to further, in-depth research.

The results presented in the paper are a reference to part (not the whole) of the survey questionnaire prepared for a purposefully selected sample. The research results are therefore a fragment of the broader empirical research conducted by the author. When describing the empirical data, a descriptive analysis of the basic research results was used.

### 4. Characteristics of the respondent group

The research sample consisted of students of a public university – the University of Applied Sciences in Nowy Sącz. In terms of gender, 81% of the group consisted of women and 19% of men. In the case of fields of study, Economics was studied by 36% of respondents, whereas Management and Economics and Corporate Finance – by exactly 32% each. In terms of the size of the enterprises where the respondents were employed the most numerous were small enterprises employing up to 49 people (61%), followed by medium-sized enterprises employing from 50 to 250 people (22%) and large enterprises employing more than 250 people (17%). The distribution of enterprises by type of activity was as follows: service enterprises constituted the largest percentage of all respondents – 74%, trade enterprises – 22%, and manufacturing enterprises – 9%. In terms of the scope of business activity, the majority enterprises operated on the local

market (52%), followed by companies operating on the domestic market (32%), and on the international market (17%). It should be noted that the data regarding the type and scope of business operations do not add up to 100%, because some of the enterprises engage in the so-called mixed activities, e.g. production and trade, and operated on more than one market.

## 5. Results of the research

Respondents were first asked to select only those statements regarding education with which they fully agreed (Table 1). Respondents could indicate more than one answer option.

Table 1  
*Perception of education (science)*

Specification	Number of indications	% of indications
Education supported by electronic teaching aids is becoming a significant and often necessary pre-requisite for effective teaching activities.	76	55
Learning should be an activity undertaken throughout the entirety of one's professional life.	73	53
No higher education course prepares a person to work in a specific position, and the changes taking place require continuous training.	72	52
Education should be expected to prepare students to make use of the achievements of civilization, as well as to co-create civilization achievements and to prepare students for what will come in the future.	53	38

Source: own study based on research results.

The tabular summary (Table 1) displays that the first three statements were confirmed by more than a half of the respondents. This fact demonstrates that the respondents are aware of the use of electronic teaching aids in education, the phenomena of lifelong learning and the fact that higher education is not the culmination of formal education, but constitutes a contribution to further expansion of knowledge and skills. 55% of respondents indicated that education is becoming a significant and necessary condition for teaching activity. Exactly 38% of the respondents indicated their future-focused expectations related to education and using the achievements of civilization as well as co-creating such achievements. The obtained research results enabled confirmation of thesis no. 1.

It can be concluded that it is worth, and even necessary, to utilize electronic teaching aids in the process of teaching, because modern media and electronic devices, such as computers or the Internet, are necessary in the process of acquiring knowledge and shaping attitudes. It is necessary to constantly develop and improve your competences in order to catch up to the changes and meet challenges of modern day, it is necessary.

The respondents were also asked to indicate from among the given list of statements concerning the labour market (presented in Table 2) those statements with which they agreed fully.

Table 2

*Perception of the labour market in terms of continuous learning*

Specification	Number of indications	% of indications
The new labour market requires from all labour market participants to prepare a lifelong learning strategy	52	37
The ongoing digital transformation brings forth social inequalities and results in the necessity for constant retraining and lifelong learning.	41	30
An important condition for success on the future labour market is shaping students' attitudes in terms of awareness of their potential and the need to expand said potential.	40	29

Source: own study based on research results.

The summary contained in Table 2 demonstrates that for more than a third of the respondents the labour market bears a significant impact on education which emphasizes continuous learning. This opinion was shared by the majority of respondents, 37%, but this number is not sufficient enough to unequivocally confirm thesis no. 2, which assumes that the new labour market requires continuous learning from each labour market participant. No significant discrepancies were observed in regards to the last two statements presented in Table 2. The respondents perceived them similarly in terms of the structure indicator.

It can be concluded on the grounds of the presented results, that the contemporary transforming labour market requires from both employees (current and future) and employers to adapt to new conditions. Adopting active attitudes in the labour market translates into the ability to engage in lifelong learning and supplementing (updating) human potential.

## Conclusions

In the age of implementing modern technologies into economic practice, enterprises need well-educated and properly prepared employees in order to develop. An appropriate education system, oriented towards the realities of the external labour market, where people who are motivated to learn throughout their lives have a greater chance of finding employment, is also needed. The labour market is closely connected to education. Educational background is the product of education and defines the status of employees on the labour market, determining their professional position in the work environment. In turn, employee skills are an indispensable element of effective and efficient functioning for enterprises.

The ponderings presented in this paper have demonstrated the connections between education and the labour market. It has been proven that education and the labour market are connected through numerous relationships and that they are multi-threaded in nature. However, the issues discussed herein require further exploration due to their

importance for both businesses (and more broadly – for the country's economy) and for the future education system. Various changes are taking place in the economy and individual enterprises, which also force changes in the area of education. In the face of these changes, a special role is played by education, which is faced with the challenges of adapting to the needs of the labour market.

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