# DEVELOPMENT OF COMPETENCIES BY STUDENTS. THE CASE OF THE UNIVERSITY OF LODZ

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#### **ABSTRACT**

**Aim.** One of the challenges of the labour market in Poland is to match competences adequately to the needs of employers and to enable future employees, including students, to acquire these competences before they start their careers. The aim of the research was to answer the questions, which methods of developing competencies are known to the students, which are used by them and how do they assess their effectiveness.

**Methods.** The research was carried out by mix-mode method, using quantitative (CAWI, N=352) and qualitative (IDI, N=10) surveys, and the respondents were students of the University of Lodz.

**Results.** The results indicate that the best known and most commonly used methods of developing competencies are: individual self-education, classes at university, professional work, internships, apprenticeships, voluntary work, trainings, workshops, courses. As regards the evaluation of the effectiveness of the indicated methods of developing competencies, the students considered professional work to be the most effective method. Moreover, the results indicate that each of the methods of developing competencies may be effective, and the effectiveness depends on several factors.

**Conclusion.** Therefore, it seems crucial not only for students to know and use various methods of developing competencies, but also for universities to ensure high quality activities, so that they effectively support the development of students' competencies and respond to the needs of the labour market.



**Keywords:** competencies, competency development, human capital, university, Poland, labour market

#### INTRODUCTION

Competencies can be discussed in many dimensions and contexts. Competencies and their management are important from a macroeconomic and social point of view also in Poland – one of the transforming societies of Central Europe. Competencies are analysed at global and international level (e.g. European Union, United Nations), national level (national competence standards) or local level, from the point of view of supply and demand on the labour market. A popular approach in human resource management is to analyse competencies in organisations of different types in the context of managing the competencies of employees and creating systems for acquiring, assessing, rewarding or developing competencies. The individual competencies of employees form the core of competency management from an organisational perspective (Op de Beeck & Hondeghem, 2010). Recently, organisations are not only looking for employees with high competency potential, but also those with specific competencies (Rakowska, 2018).

The researchers note that in research on competencies reflect two different generic streams (Strużyna et al., 2021). The first stream is focused on individual characteristic. Competency are understood as a construct consisting of personal attributes, such as the knowledge, skills, and abilities required by a person to perform job (McClelland, 1973), as well as motivation and one's self-image, social role (Boyatzis, 1982), behaviours (Draganidis & Mentzas, 2006) and many other aspects. Strużyna et al. (2021) also mentioned that the second stream starts with the work of Prahalad and Hamel (1990, 1994). The research of these authors and their followers initiated the "competence-based view" (Uzunca, 2018, p. 738) in strategic management. According to this approach, organisational competencies play a significant role, enhance the competitive advantage and longevity of the firm, and link organisational and individual levels and explore the links between them. In view of the purpose of the article, the authors' attention will be directed only to the individual perspective.

This article, in the initial part, contains theoretical considerations on the complex nature of competencies and their interdisciplinary character, and presents methods of developing them. The following parts of the article present and briefly characterise a rather rich offer of competency development for students of the University of Lodz. Then, the results of quantitative and qualitative research among the students of the University of Lodz are presented. The main conclusions of the research are discussed taking into account national and international research. Therefore, the article is part of the academic discourse on the university as a place for developing competencies in the professional field. It emphasises the perspective of students as beneficiaries of the university's offers and as entrants to the labour market.

#### UNIVERSITY AS A PLACE TO DEVELOP COMPETENCIES

However, before an individual reaches the organization as his/her workplace, one can talk about competencies from the perspective of the individual student. Burgoyne (1993) almost thirty years ago noted that there is a difficult middle ground between education as broadening the person to know society and training as the activity for shaping a person for a particular role or function. Today, in an era of having to keep up with spectacular technological changes and the increasing encroachment of artificial intelligence or dealing with uncertainty (COVID-19 pandemic), complex social changes with different backgrounds, this issue changes context. Higher education institutions should try to meet the demands of changing workplaces and societies and therefore educate students not only in technical knowledge and skills, but also in non-technical abilities (Rawboon et al., 2021). These conditions refer, among others, to the complex choice of methods of competency development and their effectiveness. Due to the size of this article, these issues will not be discussed further. Suffice it to mention that a universal guideline seems to be the use of a mix of methods of competency development (Warwas, 2016a, 2016b) and multi-level and multi-actor approach to designing and measuring their effectiveness.

Competencies can be acquired and developed at universities both during the formal teaching process and through other student activities. This article presents a look at competencies from the point of view of students at the University of Lodz (UL) – one of the largest Polish universities established in 1945, which currently has 26,000 students (Uniwersytet Łódzki, 2022a). In this study, we focused on developing competencies among full-time and part-time students, using the case study of the University of Lodz as an example. Therefore, only those methods of competency development offered by this university were included in the research. It is also worth noting that the research did not only take into account narrowly defined professional competences related to the profession in question, but various types of competences that can be useful in professional work.

# COMPETENCY DEVELOPMENT OFFER FOR STUDENTS OF THE UNIVERSITY OF LODZ

Apart from university classes within the chosen field of study, the University of Lodz offers its students other methods of competency development. These include: internships, trainings/workshops, individual coaching sessions, mentoring, activities in scientific circles and student organisations. Some of these activities are offered by the Career Office of the University of Lodz.

In the majority fields of study offered by the University of Lodz, student internships are an obligatory element of the curriculum and their length

depends on the field of study (Uniwersytet Łódzki, 2022b). Internships are carried out in accordance with *Zarządzenie nr 82 Rektora Uniwersytetu Łódzkiego w sprawie organizacji studenckich praktyk zawodowych w Uniwersytecie Łódzkim* [Order No. 82 of the Rector of the University of Lodz on the organisation of student work placements at the University of Lodz] (Uniwersytet Łódzki, 2021). In addition, students may also participate in non-mandatory internships, outside the study programme, the duration and course of which are individually agreed between the student and the employer (Biuro Karier Uniwersytetu Łódzkiego, 2022a).

Training courses and workshops for students at the University of Lodz are conducted as part of internal departmental initiatives and by the university-wide Career Office. The offer of this unit includes both trainings in hard competencies (e.g. Business English, Excel programme under the project "Students Power – a comprehensive programme of university development" co-financed by the European Union) and soft competencies (e.g. interpersonal communication, time management, design thinking, creativity course, coping with stress, etc.). The training offer is diversified In terms of duration of classes (trainings last from two to several dozen hours) and their form (stationary and online trainings). Training courses are conducted both by Career Office staff (psychologists, career advisors, trainers) and by representatives of employers cooperating with the University of Lodz (e.g. as part of the Competence Academy initiative) (Biuro Karier Uniwersytetu Łódzkiego, 2022b).

The Career Office of the University of Lodz also offers individual career coaching. This method of developing competencies is addressed to students who want e.g. to increase their self-confidence in professional situations, change jobs, find motivation for learning or plan what they want to do after graduation. As emphasised in the offer of meetings,

coaching is a process whose aim is to strengthen the client in making the intended change on their own. (...) Coaching work is based on increasing self-awareness, looking at a given situation from various perspectives and taking specific actions. (...) Coaching focuses on the present and future. The coach does not give advice, does not suggest solutions (Biuro Karier Uniwersytetu Łódzkiego, 2022c).

The University of Lodz also offers its students the opportunity to develop their competencies through participation in the Mentoring Project. This project assumes that mentors – graduates of the University of Lodz – "representatives of business, the world of culture and the media, advise university students and help them plan their career path" (Uniwersytet Łódzki, 2022c). In its assumptions, mentoring supports students in setting and achieving their professional goals, identifying their strengths and weaknesses, motivating them to develop their careers, learning about the labour market and possible development paths. In the 2020/2021 academic year, the eighth edition of the project was already held.

Students at the University of Lodz can also develop their competencies through activities in scientific circles and student organisations. In 2021, there were over 170 student scientific circles at the university (Uniwersytet Łódzki, 2022d). The nature of the circles' activities depends on the scientific subject they undertake, but most often they deal with the organisation of scientific conferences and trainings, cooperation with enterprises and non-governmental organisations, participation in competitions, organisation of charity actions.

In addition to the above-mentioned methods of competency development, the study also concerned individual self-education, understood very broadly as independent acquisition of knowledge and skills by means of podcasts, videos, webinars, books, magazines, conferences, etc.

On the basis of the literature on the subject and the methods of competency development offered by the University of Lodz, seven methods of competency development that can be used by students were selected for the study:

- professional work, internships, apprenticeships, voluntary work,
- activity in scientific circles, student organisations,
- training, workshops, courses,
- individual self-education (books, journals, videos, podcasts, webinars, meetings, conferences),
- university classes,
- · individual coaching sessions,
- · mentoring.

The authors of the research are aware that other methods of competency development are also mentioned in the literature, but due to the nature of the case, only those methods of competency development offered by the University of Lodz – the university where the respondents study – were included in the research.

#### **METHODOLOGY**

The aim of the research was to answer the question which methods of competency development are known to the respondents, which are used by them and how they evaluate their effectiveness in this process. The methods of competency development chosen for the research have been described in the earlier parts of this article.

The following research objectives were set, presented in the form of research questions:

- What competency development methods are known to the respondents?
- How (using what methods) do the respondents develop their competencies?
- How do the respondents assess the effectiveness of the indicated methods of developing competencies?

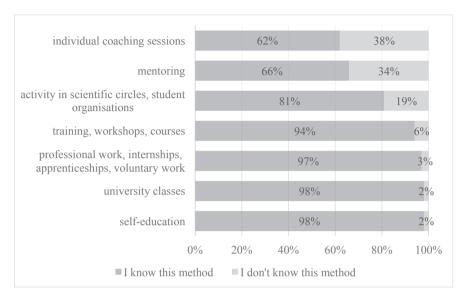
The research was carried out using a mix-mode method, with the use of quantitative and qualitative research. The quantitative research was carried out using the survey technique (CAWI), and the tool at this stage was a survey questionnaire. The study used an author's questionnaire. It was not subjected to validation because the purpose of the study was not to create standards or build indexes. The questionnaire was subject to piloting. In the questionnaire, respondents were asked three questions: whether they were familiar with a particular method of developing professional competences (answers: yes/no), how they had developed professional competences so far (respondents ticked all the methods used from the list) and how they evaluated the effectiveness of the indicated methods of developing professional competences (answers on a scale from 1 to 5, where 1 meant very low effectiveness and 5 meant very high effectiveness). The quantitative methods were complemented by qualitative methods in order to gain a deeper understanding of the respondents' opinions and experiences. Qualitative research was based on the method of in-depth individual interviews (IDI), and the tool was an interview questionnaire. The recordings of the interviews were transcribed and then analysed using NVivo Pro 12 software. The content of the interviews - the qualitative data - was then subjected to discourse analysis (Rapley, 2018). The research was preceded by desk research to ensure triangulation of methods, techniques and data sources. The field research was conducted between June 2020 and February 2021 and was based on purposeful selection. It covered a group of full- and part-time students in the last two years of undergraduate studies and in postgraduate studies at the University of Lodz. The quantitative study covered a group of 352 respondents, and the qualitative study – 10 people. The research sample consisted of 251 women and 101 men, 78 Undergraduate studies students and 274 Postgraduate studies students, and 285 Full-time studies students and 67 Part-time studies students. The second part of the research on key competencies in the labour market from the perspective of higher education students was also conducted on the same research sample. The results of this part of the study were published in a separate article (Matuszewska-Kubicz, 2021).

#### RESULTS

The first research objective was to answer the question which methods of competency development are known to the respondents. The respondents' answers are presented in Figure 1.

Among the listed methods individual self-education, university classes, professional work (including internships, apprenticeships, volunteering), training, workshops, courses and activities in scientific circles and student organizations are known to the vast majority of respondents (from 98% to 81%). A much smaller percentage of respondents is familiar with mentoring

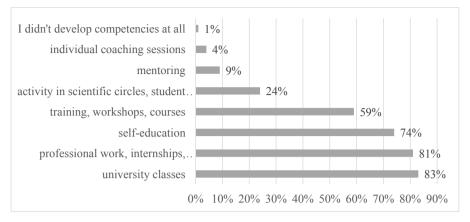
and coaching – 66% and 62% of respondents respectively. It is worth noting that these results correspond to the answers of the respondents concerning the use of the indicated methods of competency development.



**Figure 1** Knowledge of methods of developing competencies among respondents (N = 352) *Source.* Own research.

The second research objective was to answer the question how (using what methods) the respondents develop their competencies. In the survey questionnaire, respondents were asked to indicate all the methods they use. The respondents' answers are presented in Figure 2.

As the results indicate almost all respondents (99%) develop their competencies in some way. The most frequently indicated method is university classes, due to the specificity of respondents being students. Similarly, the method of developing competencies through work, including internships, apprenticeships and volunteering, is very popular (81%). Almost ¼ of respondents declared also using individual self-study (books, magazines, videos, podcasts, webinars, meetings, conferences), and more than half (59%) take part in organised forms of trainings, workshops or courses. Almost one in four (24%) respondents developed their competencies through activities in scientific circles and student organisations. The least popular methods of developing competencies among the respondents are mentoring (9%) and coaching (4%).



**Figure 2**Methods of developing competencies used by respondents (N = 352)Source. Own research.

The third research objective was to answer the question about the effectiveness of the indicated methods of competency development according to the respondents. The assessment of effectiveness was measured on a scale from 1 to 5, where 1 meant very low effectiveness and 5 meant very high effectiveness of the given method of developing competencies. In this question, only those respondents who declared that they were familiar with the particular method of developing competencies were included. Answers of the respondents are presented in Figure 3.

As can be seen from the presented results, almost 90% of the respondents consider professional work (including internships, placements, voluntary work) as an effective or very effective way of developing competencies. It should also be noted that as many as 2/3 of the surveyed persons considered this method as having very high effectiveness, which clearly distinguishes it from other methods - other methods were assessed in the same way by up to 28% of respondents. According to most respondents also trainings, workshops, courses (69%), individual self-study (60%) and mentoring (53%) are highly or very effective. Opinions of the respondents on the other methods of developing competencies were divided. As the least effective methods of developing competencies, respondents considered individual coaching sessions (31% of respondents described their effectiveness as low or very low) and university classes (30% of respondents described their effectiveness as low or very low). However, it is worth noting that both of these methods were also rated as effective or very effective by 43% of respondents (coaching) and 39% of respondents (university classes) respectively. In terms of activities in study circles and student organisations, this method was most often considered by the respondents as moderately effective in the development of competencies.

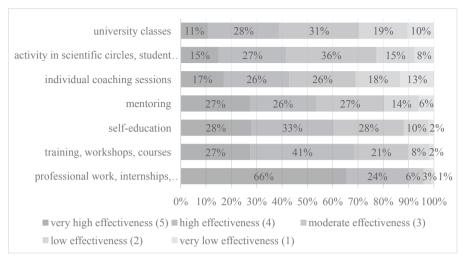


Figure 3 Evaluation of the effectiveness of methods of developing competencies according to the respondents. (Professional work, internships, apprenticeships, voluntary work, N = 343; Activities in scientific circles, student organizations N = 286; Trainings, workshops, courses N = 332; Individual self-study N = 346; University studies N = 344; Individual coaching sessions N = 217; Mentoring N = 234)

Source. Own research.

The opinions of the respondents on the conditions of effectiveness of the presented methods of developing competencies should also be based on their statements obtained during the qualitative research – in-depth individual interviews.

As regards the development of competencies through work (including internships, apprenticeships, voluntary work), the persons surveyed expressed a decidedly positive opinion, believing that it is one of the most effective methods of developing competencies. However, they often drew attention to the importance of the conditions of a specific place, e.g. for an internship or apprenticeship. In order for an internship or apprenticeship to be valuable, in the students' opinion, it should be paid and consist in realisation of various, responsible, specific tasks performed on a daily basis in the company ("I think this is the basis for the employer to understand it and not be afraid to give responsible tasks, which may be really challenging." [IDI-10]). The internship is also perceived by students as a place where it is possible to make mistakes without much responsibility. The student should also have the opportunity to learn from more experienced employees and the internship/internship supervisor. Respondents also emphasised that valuable internships or placements require motivation on the part of the

student and involvement of two parties – the student and the employer ("Certainly, there must be willingness on both sides, because the employer may offer to teach us a lot, but sometimes the student may simply not want to learn." [IDI-6]).

As regards activities in scientific circles and student organisations, the majority of students speak positively about this method of developing competencies, indicating various benefits of such activities. Among them, they mention: making new acquaintances, opportunities to participate in trainings, internships, apprenticeships, developing organisational skills, developing creativity, greater openness and empathy, gaining skills to conduct training, broadening theoretical knowledge, the possibility to write articles and organise scientific conferences. Respondents particularly often emphasised the relational character of student circles and organisations, which resulted in the establishment of close interpersonal relations ("On the one hand, these are certain contacts and friendships which are established, support groups." [IDI-9]; "I gained the greatest experience, the greatest knowledge, contacts and, above all, a wonderful community and I would not give up, would not change this decision in my life." [IDI-10]). Activity in the circles was also described as "an additional gate for development" [IDI-10]. At the same time, the students emphasise that the opportunities for competency development through activity in scientific circles largely depend on the activity and functioning of a particular circle. They also mention the circles that operate only theoretically ("I think that the circles are very effective, but you have to look for it properly, because there are circles that are simply dead at the University of Lodz." [IDI-10]).

As far as the development of competencies through participation in trainings, courses, workshops is concerned, the persons surveyed also mostly notice the effectiveness of this method. They emphasize, however, that a valuable training should focus mainly on practice, not only on theoretical issues, and should involve participants ("Everyone should have an opportunity to speak, ask questions, be asked." [IDI-5]) and be conducted by an experienced trainer ("It is not even about people with education, but with great experience, by practitioners." [IDI-10]).

In the area of competency development through individual self-study, the students assess this method as less effective than the previous ones. They also emphasise that self-motivation and self-discipline to acquire knowledge on their own is key here ("No one forces us, we have to force ourselves, organise it ourselves." [IDI-4]). They also emphasise that in the case of group training, learning new skills may be easier than individually ("It is known that it is always easier in a group." [IDI-8]).

The respondents were also asked about their opinion on the effectiveness of University classes in developing competencies. Here, too, students emphasised the great importance of the manner in which classes are conducted and the approach of the lecturer ("However, not all classes are conducted in such a way that we as students actually get something out of

them." [IDI-6]). In their opinion, exercises are more effective than lectures, as well as other activities that activate and engage students. Moreover, in the opinion of the respondents, the approach and experience of the lecturer and transfer of up-to-date knowledge is also crucial:

If someone has no practice and talks about something only from a theoretical level, does not support it with their work or even experience (...), and the information I receive from the lecturer is contrary to what is happening in the 21st century, then no, these are ineffective classes, this is wasted time [IDI-10]

The students also shared the opinion that the classes at the university may constitute the basis for acquiring competencies, which should be supplemented with other methods ("It is a primer, which should be supplemented, so as to catch up with the competencies of the future, (...), so as to meet the needs of the labour market." [IDI-9]).

The respondents were also asked about coaching as a method of competency development. The majority of the surveyed students did not take part in professional coaching sessions, however, most of them expressed their belief in the effectiveness of this method and willingness to use it in the future. Among the benefits of coaching, the possibility to define one's own professional goals was emphasised:

It helps us to create our professional path by ourselves, or simply goals that we currently want to pursue, it just helps us to find goals, it helps us to find this path, but it leaves everything to us, that it rests on us [IDI-6]

The last surveyed method of developing competencies was mentoring. The persons surveyed very often connected this form with internships or apprenticeships and most recognised it as effective ("However, we learn most from our elders." [IDI-1]). They emphasised the important role of the approach of the mentor and the involvement of the mentee:

We have our own authority and it is easier for us to simply direct our lives, because we see that this person succeeded, and give us advice, so we must also succeed, and we have this motivation thanks to it [IDI-7]

Among the advantages of mentoring, they most often mentioned the possibility of consulting and improving the performance of tasks, making use of the experience of an older employee, gaining authority, increasing motivation for development ("One can quickly consult something and compare it with the experience of such a person." [IDI-10]).

#### DISCUSSION

The research results provide answers to the research questions posed. Regarding the first research question concerning the respondents' knowledge of the indicated methods of developing competencies, it should be indicated that five out of seven methods are known to the vast majority of respondents (individual self-study; university classes; professional work,

internships, apprenticeships, volunteering; training, workshops, courses; activities in scientific circles, student organisations). On the other hand, mentoring and coaching are the least known to those surveyed, with 66% and 62% of respondents knowing them respectively.

Answering the second research question concerning the use of the indicated methods of developing competencies, it should be noted that the most popular are: university classes, professional work, including internships, apprenticeships and voluntary work, individual self-education and training, workshops and courses. Mentoring and coaching are by far the least frequently used methods by the persons surveyed.

The third research question concerned the evaluation of the effectiveness of the indicated methods of developing competencies. The persons surveyed considered professional work (including internships, apprenticeships, voluntary work) to be by far the most effective method. According to most of the respondents, training, workshops, courses, individual self-education and mentoring are also highly or very highly effective. On the other hand, the opinions of the respondents were divided as to the effectiveness of individual coaching sessions, university classes and activities in scientific circles and student organisations.

The respondents' opinions on the effectiveness of the indicated methods of developing competencies obtained in the quantitative study were supplemented by the results of the qualitative study. Several key points emerge from them. Firstly, none of the surveyed methods of competency development was identified as unequivocally ineffective; mostly students perceived possible or considerable effectiveness of each method. Secondly, however, none of the methods were also found to be unconditionally effective; with each method there were a number of factors that determine the effectiveness of a particular method. These factors, irrespective of the method, primarily concerned the motivation and commitment of the competency developer himself/herself - according to the students this is the basis for development using any method. Moreover, another important factor is the competency of the person participating in the process, e.g. the practical work experience of the lecturer and trainer or the commitment, willingness to help and share knowledge of the mentor. Another factor conditioning the effectiveness of competency development with a given method are the conditions of competency acquisition, e.g. internship/placement in an organisation enabling the realisation of valuable professional tasks, active scientific circle, engaging form of university classes. It should be emphasised that the students were asked about their subjective perceived effectiveness, i.e. their feeling that the method allows them to increase their level of competency. The research did not analyse the actual competency gains of the students.

In Poland, numerous other studies have been conducted on developing competencies among students using a variety of methods in the context of preparing for entering the labour market, which are worth referring to the

results of the research described in this article. In one of the Polish studies, students were asked about their general assessment of the activities of their universities in terms of preparation for practical work. The results of this research indicate that more than 58% of the respondents do not feel prepared for practical work, and only more than 20% believe that they feel prepared, and this is due to the university. Students argue that universities place too much emphasis on imparting theoretical knowledge instead of paying attention to the practical preparation of students for their professional role (Kukla, 2018), and the area of the mismatch between Polish universities and the modern world has also been widely described by Kobylarek (2017). A similar demand to include more practical activities and the development of social competencies has also appeared in other studies of Polish students (Jeruszka, 2015). The topic of the effectiveness of methods of developing students' competencies in their research was also raised by Piwowar-Sulej et al. (2021). Their results indicate that, according to the respondents, the most effective methods in developing individual entrepreneurial competencies are discussion, as well as the project method and coaching, while the researchers note that the lecture method still dominates in educational practice. Other researchers also postulate changes in the educational system in Poland, consisting in a radical reduction of cognitive, verbal content in favour of the education of soft competencies and practical skills (Popczyk, 2018). Students in another study were asked about their opinions on university classes in subjects teaching interpersonal competencies. Most of them (especially part-time students with work experience) positively evaluated this type of classes, appreciating the usefulness of the competencies taught and their compatibility with labour market expectations (Szelagowska-Rudzka, 2018). The results from the cited research relate to the present study, where the thread concerning the effectiveness of university classes also includes the postulate of their practical character and the realisation of classes activating and involving students.

In Poland there has also been conducted research on students' opinions on other methods of competency development. One of them concerned students' opinions on taking up employment and internships. It has been shown there that, according to the respondents, by taking up employment or internships, the student develops features desired in the labour market, e.g. greater independence, responsibility, resourcefulness, business orientation, readiness to change and expand their competencies. Analysing the factors conducive to the development of competencies through work, the researchers concluded that the development of a student's competencies depends primarily on his/her internal motivation, and any type of work can develop competencies, if this work is the student's own activity. The same research also mentioned the important role of mentor support and providing feedback to the student during work or student apprenticeship (Jeruszka, 2015). These findings largely coincide with the conclusions reached in this study in the section on developing competencies through

student internships, where the role of student and employer involvement was also emphasised. Furthermore, other studies indicate that the effectiveness of student internships may also depend on the proper preparation of the internship programme at institutional, process and individual levels. At the individual level, it is emphasised, among other things, that students are made aware of the objectives of the internship, that the internship is tailored to the student, and that there is substantive supervision from the university (Klimkiewicz, 2015). It is also advisable that students do not work significantly more than half-time, as paid work should be a form that supports the student's development, rather than competing with studies (Sarzyńska-Mazurek, 2021). Foreign researchers also address the topic of working students, most often in the context of role-conflict, depletion, and enrichment model, work-based benefits and work-based demands (Creed et al., 2015), role boundaries between work and study (Chu et al., 2021), the Work Study Congruence Scale (Chu et al., 2019) and impact of the COVID-19 pandemic on working students (Tsurugano et al., 2021; Lup, 2021; Ebardo & Wibowo, 2021; Barros et al., 2022).

Polish researchers have also addressed the topic of activities in scientific circles in the context of students' competency development. Their research indicates that the involvement of students in the activities of the researched scientific circles makes it possible to achieve a noticeable increase in students' knowledge, skills, and social competencies (Kurzyk, 2015), and the scientific circles themselves are a valuable addition to the educational offer (Śnieżek, 2017). International research on activities in student organisations addresses, among other things, factors that motivates students to participate in student organisations, and how such participation influences students' overall development (Shahabul et al., 2021). The results of the cited research are reflected in the present study, where the surveyed students also indicated numerous benefits of activities in student organizations for the development of competencies, including: making new friends, opportunities to participate in training, internships, apprenticeships, developing organizational skills, developing creativity, greater openness and empathy, gaining skills in conducting training, expanding theoretical knowledge, opportunities to write articles organizing scientific conferences. However, the specificity of activity of scientific circles and student organisations at Polish and foreign universities should be taken into account here.

It is also worth mentioning the research in a group of Polish students on self-education, where students' self-educational activity was manifested by planning work on their own development, mainly goals and ways of its implementation, and conscious use of various opportunities for self-development (Rodek, 2014). It is worth noting that in the present research, students perceived self-study as a less effective method of competency development than others, requiring a high level of self-motivation and self-discipline.

Coaching and mentoring are further methods of developing student competencies addressed in international research. Australian research indicates that "mentoring relationships enable mentees to build knowledge and skills, develop networking opportunities and build confidence" (Scerri et al., 2020, p. 143). Furthermore, "a formal matching process enhances the initiation of the mentoring programme, preparation and goal setting sets the stage for a positive relationship, emotional and professional support cultivates commitment to the mentoring relationship, and the mentoring programme allows for valuable self-reflection" (p. 143). A German study on career coaching for university students indicates that "working on clients' self-clarity positively contributes to the development of clarity of career goals, career optimism and career security" (Ebner, 2021, p. 20). The findings further indicate that "the positive impact of career coaching on clients' optimism and career security is explained by an increase in career goal clarity" (p. 20). Relating the cited results to the present study, it is worth noting that mentoring and coaching are the least known and least used methods of competency development among the students. This may be due to the limited opportunities to apply these methods compared to, for example, the training offer at the universities.

Relating the results of the research described in this article to other research, it is worth mentioning the research on career centres at universities, as units that offer students a variety of activities to support the development of competencies. International research focuses on analysing the role of career centres at universities in developing students' competencies and preparing them for the labour market. Research by the Gallup Institute and Purdue University (2016) indicates that nearly 80 percent of recent U.S. college graduates who had visited career services offices rated their helpfulness to be somewhat to very helpful. Other research shows that "career education activities supported the development of student" social capital and personal adaptability through staying positively focused and proactive in career exploration and job searches' (Helens-Hart, 2019, p. 1). Researchers also emphasise the need to link career office activities with study programmes. One study considers faculty perspectives in collaboration with career offices, indicating that "career centers should engage faculty as a constituent group, describe to faculty how centers help students address broad career questions, and tailor resources for faculty" (Schlesinger et al., 2021, p. 145). Other research also points to the need for linkage between the student's professional preparedness and their course of study and recommends the program for integrating career preparedness activities into the business curriculum across multiple years in conjunction with our university career services (Crowne et al., 2020). It is also suggested "to expand the functions and role of career centres created in HEIs in order to establish the university's activity by the labour market requirements and to assist graduates in the labour market as well as provide continuous professional development programs and training for the teaching staff" (Hov-

hannisyan et al., 2018, p. 42). Academic publications on career offices also describe case studies on introduced programmes to support students in developing competencies and enhancing employability and employment search skill development programme (Mallinson & Burns, 2019; Duncan et al., 2019). Career offices at universities are also implementing a variety of technological solutions to support their activities, such as an innovative online platform (Lee & Patel, 2020), "a prototype of an online module, which serves as a career centre in connecting students with academic institutions and companies in an effort to find and manage internship positions and jobs" (Fuerstner et al., 2015, p. 89), career path recommendation framework (Patel et al., 2017). Research on academic career centres has also been conducted in Poland. At Polish universities, academic career centres offer a wide and varied range of support (Trojanowska, 2015) such as: career counselling, psychological, educational, entrepreneurship counselling, training for students on how to navigate the labour market, soft skills trainings, entrepreneurship trainings, monitoring the fate of graduates, labour market research, information about job offers and internships, organisation of student apprenticeship, organisation of job fairs (Rzecznik Praw Absolwenta, 2014). Therefore, a conclusion can be drawn that due to the diverse nature of their activities and the initiatives undertaken, career offices operating at universities make an important contribution to the possibilities of developing students' competencies. However, despite the rich offer of career offices to students, a significant limitation seems to be the relatively low recognition of career offices among students and the low percentage of those who take advantage of their offer (Sroka, 2014; Nymś-Górna et al., 2018), hence the postulate to improve the promotion of career offices' offer among students, with the support of departments of universities (Rzecznik Praw Absolwenta, 2014).

#### CONCLUSION

Summing up the results of the research, it should be indicated that out of the researched methods of developing competencies, the most known and most frequently used by the students under study are: individual self-education; university classes; professional work, internships, apprenticeships, voluntary work; trainings, workshops, courses. Activities in scientific circles and student organisations are known to the students, but used by them less frequently. Whereas mentoring and coaching are among the least known methods (although, at the same time, more than 60% of the respondents know both of them) and by far the least used methods of developing competencies among the surveyed students. Regarding assessment of the effectiveness of the indicated methods of developing competencies, the persons surveyed considered professional work (including internships, placements, voluntary work) to be by far the most effective method. According to most

of the respondents, training, workshops, courses, individual self-education and mentoring are also highly or very highly effective. Moreover, the analysis of the statements of the persons surveyed during the individual interviews indicates that each of the methods of developing competencies may be effective, and the effectiveness is affected by: motivation and involvement of the person developing competencies, competencies of the person participating in the process (coach, mentor, lecturer) and conditions and environment for acquiring competencies. Moreover, an important unit offering students various forms of activities developing competencies are career offices at universities.

Therefore, it can be concluded that students, for the most part, know and use the various methods of developing competencies available at the university. However, the key issue seems to be not only the awareness of their existence and a wide range of opportunities, but also ensuring high quality of activities, so that they effectively support the development of students' competencies, actually responding to the needs of the labour market.

The research is not free of limitations. Relating the issue of evaluating the effectiveness of methods of developing competencies to the concept of levels of evaluation of training according to Kirkpatrick (1994), in the conducted research only the first level (reaction) and the second level (teaching) were taken into account, examining the feelings and opinions of students about the methods known to them and what competencies they developed thanks to them. However, it would also be reasonable to complement the research with the other two levels (behaviour and results) in order to find out whether and to what extent the competencies developed are applicable in professional work.

Moreover, the limitations may at the same time constitute a recommendation for further research work in the discussed subject matter. First of all, the authors note that the catalogue of methods of developing competencies may be expanded to include other methods, and also made more specific by taking into account the following methods: online or offline, synchronous or asynchronous, individual or group. Such an approach may be particularly relevant in the context of the need to work and learn remotely or hybrid in times of the COVID-19 pandemic. Moreover, the issue of which methods are used by the respondents to acquire particular types of competencies, as well as what are the reasons for choosing a particular method when developing a particular competency, is certainly further worthy of research. The topic of combining different methods and the effectiveness of these combinations in developing a given competency also seems to be interesting for research. It is also worth comparing the research results obtained for one Polish university - the University of Lodz - with the situation of other universities in Central and Eastern Europe in order to contrast approaches to competence development in other transforming societies.

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