

## РОЗДІЛ 4. ТЕОРІЯ І МЕТОДИКА УПРАВЛІННЯ ОСВІТОЮ

CROSS-BORDER WAYS FOR UNIVERSITY MANAGEMENT:  
IN SEARCH OF THE LINK BETWEEN INTERNATIONALIZATION,  
EMPLOYABILITY, AND LEAN MANAGEMENT FOR HIGHER EDUCATIONТРАНСКОРДОННІ ШЛЯХИ УПРАВЛІННЯ УНІВЕРСИТЕТОМ:  
У ПОШУКАХ ЗВ'ЯЗКУ МІЖ ІНТЕРНАЦІОНАЛІЗАЦІЄЮ,  
ПРАЦЕВЛАШТУВАННЯМ ТА ЕКОНОМНИМ УПРАВЛІННЯМ ВИЩОЇ ОСВІТИ

*The paper presents an attempt to articulate the link between the notions of internationalization, employability, and modern technologies of higher educational institutions management such as "lean management concept". The focus of empirical research is centered on the "internationalization-at-home" paradigm, which is viewed as the nexus of international and intercultural dimensions introduced into the formal and informal curriculum within domestic learning environment. As such, internationalization-at-home stands for the importance of internationalizing learning outcomes for all students of a higher educational institution, not only for those who study (or have internship, etc.) abroad. This allows to address the concept of employability within the broadest sense as the one, which relates higher education to society, to the immediate needs of the labour market, as well as to social activities, such as engaging with local communities. Viewed from this perspective, the concept of lean management can be defined as one of the 21st century models of university management transplanted from the sphere of private enterprises and business companies' management aimed at the enhancement of careers, employment, and integrated learning within higher education agenda. The analysis has been conducted regarding the internationalization process in Polish higher education with the application of analytical data provided by Jagiellonian University, Krakow, Poland. The collected data have showed gradual increase of internationalization process indicators, the fact that – despite certain degree of subjectivity – allowed to conclude that the introduction and lean management principles in higher education allows for the intensification of internationalization process and enhancement of student employability in an environment shaped by complex relationship between higher education and labour market.*

**Key words:** higher education, internationalization, employability, lean management, lean management culture of a higher educational institution.

*Проблематика наукової розвідки сфокусована на встановленні взаємозв'язку між поняттями інтернаціоналізації, працевлаштування та сучасними технологіями*

*управління закладами вищої освіти, такими як «поняття оцідливого управління». У центрі уваги емпіричного аналізу постає парадигма «інтернаціоналізація вдома», яку розглянуто крізь призму взаємопов'язаних міжнародного й міжкультурного вимірів, запроваджених у формальні й неформальні (інформальні) освітні програми «рідного» освітнього середовища. Таким чином, «інтернаціоналізація вдома» робить наголос на важливості інтернаціоналізації результатів навчання для всіх здобувачів освіти тієї чи іншої освітньої інституції, а не лише для тих, хто навчається (чи проходить стажування тощо) за кордоном. Вищезазначене дозволяє сприймати концепцію працевлаштування в ширшому сенсі, а саме як поняття, яке пов'язує вищу освіту із суспільством і бізнес-компаніями й спрямовану на покращення кар'єрних перспектив, подальшого працевлаштування та інтегрованого навчання у вищій школі. Емпіричні дані щодо процесу інтернаціоналізації на прикладі польської вищої освіти представлено Ягеллонським університетом, Краків, Польська Республіка. Відібрані дані продемонстрували поступове зростання показників процесу інтернаціоналізації, що, незважаючи на певну міру суб'єктивності, дозволило говорити про поступове впровадження принципів оцідливого менеджменту у вищій школі й водночас про інтенсифікацію процесу інтернаціоналізації та підвищення індексів працевлаштування здобувачів освіти за умов освітнього середовища, сформованого під впливом складних взаємозв'язків між вищою освітою та ринком праці.*

**Ключові слова:** вища освіта, інтернаціоналізація, працевлаштування, оцідливе управління, культура оцідливого управління закладом вищої освіти.

UDC 341.221.4 : 378 (4-11)  
DOI <https://doi.org/10.32843/2663-6085/2022/43/2.24>

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**Generalized Formulation of the Problem.**

The issue of higher educational institutions (HEIs) graduates' employability remains a continuing policy priority for higher education policymakers in many economies around the world. These concerns have been given renewed focus in the 2020 climate of wider labour market uncertainty. Policymakers continue

to emphasise the importance of employability skills for graduates to be fully equipped in meeting the challenges of an increasingly flexible labour market. One of the currently most promising ways to enhance these skills is emphasis put on internationalization and its "internationalization-at-home" paradigm. International, global, intercultural, and entrepreneurial

competences are highly requested by modern society, by international and local job market. International mobility and “export” internationalization can equip with the mentioned competences limited groups of students, therefore, modern HEI is required to consider other inclusive and student-oriented approaches, such as internationalization-at-home, to assure non-exclusive access to these competences. Thus, the paper reviews a number of the key empirical and conceptual themes in the area of internationalization (with regard to Eastern European HEIs) using the lens of employability and current trends in higher education management such as *lean management concept* in order to make sense of graduate employability as a policy issue.

The ongoing COVID-19 crisis is challenging people, households and businesses in unprecedented ways. While containing the pandemic and protecting people is the top priority, disrupted supply chains, containment measures that are limiting economic and social interactions and falling demand put people’s jobs and income-generation opportunities at risk. According to International Labour Organization, the economic and labour crisis created by the COVID-19 pandemic could increase global unemployment by almost 25 million people (7.4 million people in middle-income countries) and the overall losses in labour income might reach USD 3.4 trillion (USD 14.8 billion in middle-income countries) [11]. A long and difficult recovery process is expected in most sectors of world economy. An immediate employment and business support is needed in all spheres of entrepreneurial activity, which poses the question for modern universities as to whether they can ensure that their curricular, co-curricular, and extra-curricular activities reflect the dynamic demands of modern society and labour market [4; 12]. While forming their own development strategies, it is extremely necessary for HEIs to ensure a competitive policy in educational services market and look for new effective approaches to management.

One of the most promising approaches at present is focused on the idea of using lean management in higher education [2, p. 14; 5, p. 57], based on principles of effective resource management, attention to consumer needs, concentration on eliminating all types of resource losses, effective use of intellectual potential etc. Lean management application becomes particularly relevant in the segment of internationally-research-oriented universities focused on global rankings as indicators of internationalization and performance evaluation [1, p. 59; 14, p. 15; 33, p. 98]. As such, the present research reflects on a number of implications connected with the enhancement of higher education students’ employability in an environment shaped by globalization and at the same time complex relationship between higher education and global (national / regional) labour market.

### Recent Research and Publications Analysis.

Over the last couple of decades, the systems of higher education worldwide have undergone the most influential transformation roughly entitled “internationalisation of higher education”. The starting point for this process is generally considered to be globalisation with supporting factors, such as: convergence of national systems of higher education, introduction of international education, formation of multi-national model of life-long learning integrated into the global educational community, etc. [1; 24]. Current research in the field states that the process of internationalization has come as a response to integrated transformation of higher education, and it is determined by an increased need to strengthen partnerships and coordinate actions at the national, regional and international levels in order to ensure the quality of higher education systems around the world [14]. International cooperation is currently being considered as one of the main indicators of the definition of quality in the field of education and research and at the same time as one of the main tools for its enhancement. Therefore, almost all HEIs around the world are engaged in international activities and seek to expand them. Internationalization thus has ceased to be casual or specialized and has become a more centralized; internationalization of higher education is a well-organised, and thoughtful component of institutional work.

J. Fielden [6, p. 69] identifies three motivations for HEIs to internationalize in order to train students for competitive global markets:

- 1) preparing students to be able to work in fields that have an international dimension, whether working overseas, for a transnational corporation or in an organization which engages with other countries or other cultures;
- 2) contributing to the resolution of global problems that require international collaboration of academia, businesses, and governments;
- 3) promoting international values – to ensure that students are “global citizens”, understanding and appreciating cultural diversity, are engaged with global issues such as poverty, health and environmental change.

The first motivation is of particular importance for the current research, as it allows to argue that the process of internationalization can be viewed as the process of cooperation with state authorities, university leaders, faculty, and students from different countries to support the international component of higher education with the aim to enhance university graduate employability skills.

With regard to the report of the 2020 EUA Learning & Teaching Thematic Peer Groups “Meeting skills and employability demands” employability is considered as part of universities’ mission to educate, and to contribute to future graduates’ personal

and professional development [23]. It is generally understood to address the need to equip students with the skills and competences demanded by labour market, or the world of work.

One of the indicators that characterizes the effectiveness of educational policy of any country is the unemployment rate among university graduates. Over the last decades, EU member states have developed various mechanisms to regulate the interaction of higher education with global / European / national labour market. However, the transition of university graduates from university to employment remains a significant challenge for EU countries [26]. Recent data from Estonia [13], Slovakia [7], Serbia [29] etc. show the rise of unemployment among university graduates and difficulties in finding their first job. To reduce youth unemployment, new strategies to balance the interaction of higher education with the labour market in the face of the challenges of the new decade are being developed. While working on these various factors should be taken into consideration, such as: HEIs' inadequate guideline as to determining the scope and directions of educational services provision – focusing on population demand rather than on the needs of labour market – the situation, which leads to difficulties in finding work placement for young professionals. Thus, negative trends regarding higher education and employability of HEIs graduates of the last decade are:

1) dissatisfaction among potential employers with the level of competences and skills development among HEIs graduates (HEIs graduates should ideally acquire – apart from the solid knowledge in their field – a mix of transversal and discipline-specific skills);

2) low level of partnership between HEIs, business representatives, and the state, diversity of their demands and expectations;

3) lack of coordination when it comes to the work of state and regional authorities. A response to this would be to emphasise the role of higher education in educating the graduates of tomorrow and shaping citizenship, plus to stressing the role of social activities, such as engaging with local communities, and thus making the concept of employability much broader.

The end of the 20th century in higher education was marked by general understanding among the key actors that the concepts and models of university management used so far had become less effective, as they only occasionally took into account the relation of higher education to society realized through educating and training of future graduates as professionals and citizens. Parallel to this the *paradigm of New Public Management* appeared, which presupposed running public service organizations in a business-like manner with the purpose to improve their efficiency [22].

Numerous researches conducted in educational sector have showed that the implementation of

Process Management concepts brings positive effects to the organizational and technical system of HEIs [3; 15, p. 55; 16, p. 91; 20; 30, p. 99]. The conducted research clearly indicates that a permanent change in the university management model is possible only through the change in the organizational culture. And the latter is possible only through profound self-reflection on the essence of the university's activities, its mission, the current state of affairs and development goals [9, p. 49]. Considering the above, more and more universities all over the world have started applying a new approach referred to as *Lean Higher Education* [2, p. 22] or *Lean University* [17–19].

Of particular importance for lean management in higher education there is the determining role of organizational culture of an educational institution. This interlinkage has been researched by J. Maciag from Jagiellonian University in Krakow, the Republic of Poland, who states that there is a large gap between the dimensions of Lean Culture and the existing organizational culture of Polish HEIs. The researcher has identified that the assessment of Lean Culture is statistically influenced by the type of university – private educational institutions are overall closer to the culture of lean. Culture barriers of lean management outlined by J. Maciag are: concentration on short-term results; lack of integration around vision of university; currently existing in Polish higher education culture of evaluation and bureaucracy; lack of process improvement connected with the tendency to avoid problems with teamwork caused by functional structure of an institution; low sense of financial and organizational responsibility; lack of acceptance for radical changes [19].

Thus, lean management is the expression of the willingness on each hierarchical level of a HEI to question one's own behaviour, to learn from mistakes and to continuously develop new solutions towards waste-free processes. It stands for permanent customer-focused and value-adding thinking and acting. Lean management is a humanistic concept of management based on profound self-reflection on organizational, technical, and cultural conditions of a university. It is based on two fundamental values that are close to the traditional academic ethos:

1) respect for people;

2) constant striving for perfection.

In the operational dimension, the implementation of these values is manifested through actions aimed at increasing the value created for the school's stakeholders (students, employees, scientists, lecturers, etc.) by simultaneously minimizing or eliminating all sources of waste [27].

**Highlighting previously unresolved parts of the overall problem.** Having analysed the theoretical and methodological material on the subject of research, as well as having performed the comprehensive analysis of lean management principles application

within Jagiellonian University (Krakow, Polish Republic) functional profile, the following observation has been made – researchers in the field of higher education lean management state that there is still certain lack of in-depth institutional transformations towards becoming lean HEIs connected with the fact that most universities around the world still blindly, sometimes intuitively, relying only on experience in the industrial sphere, develop this completely new for them direction of institutional profile [8, p. 88; 17, p. 72; 21; 25; 32]. Polish higher educational landscape, according to J. Woźnicki, demonstrates that the majority of Polish universities, especially larger public educational institutions, despite their essential role in strengthening the innovative potential of national economy, did not adapt their organizational systems to current trends in the area of quality management, which involves, among other, strong focus on Lean Culture and internationalization [32, p. 77].

**The aim of the present article** is to demonstrate how cross-border ways for HEIs' management such as lean management and institutional Lean Culture can potentially enhance internationalization process within higher education sector and, as a follow-up, employability of University graduates.

**Body of the Paper.** The empirical analysis of lean management application as one of possible means to enhance internationalization within higher education sector, and, consequently, prospects of employability for HEIs graduates, has allowed to identify a number of typical features of such application with regard to grouping them into three strategic components.

*Strategic component 1.* Modernization of content, quality assurance of education, formation of modern educational environment is one of the most important in the structure of strategic priorities for lean management application with the aim of internationalization and employability enhancement. It should be noted here that universities may not have a clear definition of “employability” within the institution, but instead commonly use definitions of “graduate attributes” or “graduate identity”, with defined aims (such as students acquiring solid knowledge in their fields of study) and graduate outcomes [23]. However, as it has been stated above, the attributes that graduates should ideally acquire typically include a mix of transversal [31] and discipline-specific skills. The importance of this strategic component is determined by the need for a fundamental update of the structure and content of educational process based on a wide variety of tasks and specific mechanisms, including the introduction of new professional and educational standards with a competency-based approach, modernization of the methodology and development of educational syllabi, curricula, training programmes, elaboration of new textbooks, incl. e-books, accrediting new study programmes, etc.

It is vital to address employability at the curriculum level, as this offers the possibility to work on learning outcomes in an integrated approach. The role and goals of international internships within the curriculum need to be reconsidered. This raises the questions of how a continuum can be created between education and training, and how training can meet both employers' demands and the academic requirements in terms of content and duration [23]. One of possible answers is that new curricula should be developed on a modular competency approach that ensures:

- a) flexibility of educational process;
- b) focus of learning on the result;
- c) tracking of intermediate learning outcomes, adjusting them if necessary;
- d) acquisition of certain competencies in the short term of study;
- e) a lifelong learning orientation.

The modular competency approach means changing the logic of the content and organization of the learning process, in particular the transition from knowledge acquisition through the study of subjects to the acquisition of competencies defined by employers and educators during the work processes.

*Strategic component 2.* Decentralization of financing and management opens the way to building an effective dialogue between HEIs, employers, and local authorities. As experience of many European countries shows, decentralization is one of the real ways to optimize the financial expenses, strengthen the influence of regional authorities and employers on the development of higher education. This approach encourages local authorities to regularly monitor the labour market, take into account its features, dynamics. An important task is to diversify financial resources, optimize the costs of HEIs maintenance, engage international donors' funds to the sphere of higher education, participate in internationally funded research projects, as well as objectively determine the cost of training staff of different occupations, considering the complexity of the specialty.

*Strategic component 3.* Social Partnership in the field of higher education, formation of flexible and mobile educational directions in compliance with labour market needs. Starting from the end of the 20th century and up to now considerable part of Polish population acquired qualifications and skills through non-formal and informal education. Beyond the curriculum, there are various ways in which students may acquire skills, especially transversal skills. In addition to the classroom, where a variety and combination of teaching methods could be used, skills acquisition and training also takes place through informal or non-formal learning, or in a mixture of co-curricular and extra-curricular situations. In order to implement this objective, which will improve the situation in the labour market, it is necessary to develop assessment criteria and establish qualification centres

for the evaluation and recognition of non-formal and informal education. Involving employers in dealing with some problematic issues of higher education meets their interests. Main enterprises for which HEIs train the workforce might provide training centres, modern equipment, and conduct training for students in real workplaces. Higher education should take into account the needs of the labour market which, in fact, is formed by private enterprises. It is almost impossible to obtain objective information about the needs for specialists in different occupations without the involvement of employers. This is especially true for small and medium-sized enterprises that are hardly involved in gathering information on existing vacancies. Therefore, in this respect, the cooperation of higher education and employers, as well as representatives of regional authorities, is extremely important.

**Conclusions.** The empirical analysis of the application of lean management principles as a means to enhance higher education internationalization and HEIs graduates' employability has allowed to highlight the following: reflecting on the results of applying lean management principles makes us aware of the need to stop defining the degree of internationalization only by the number of foreign students enrolled at HEIs. Instead, the focus should be made on development of adjusted teaching and research profile, which would substantially be based on international strategic partnerships leading to high quality of teaching and research through creating joint study programmes conducted in foreign languages, international doctoral programmes and employing internationally renowned scientists and scholars. In case of Poland (Jagiellonian University in Krakow), the introduction and support of the mentioned principles of lean management have led to the increase in the formal statistical indicators of internationalization starting from the year 2010 and up to 2020: amount of bilateral MoUs – 167 (2010) up to 316 (2020); inbound mobility: number of foreign students who have completed the full cycle bachelor's / master's degree – 1 201 (2010) up to 3 958 (2020); Inbound Mobility: number of foreign students who have completed the full cycle PhD degree – 255 (2010) up to 371 (2020); Inbound Mobility: participation in Quin Jadwiga Fund granting schemes – 77 (2010) up to 176 (2020); Inbound Mobility: participation in Erasmus / Erasmus+ Programme – 257 (2010) up to 606 (2020); Outbound Mobility: participation in Erasmus / Erasmus+ Programme – 756 (2010) up to 1 107 (2020); Number of outbound mobile students in accordance with bilateral agreements – 507 (2010) up to 1 787 (2020); Number of inbound mobile students in accordance with bilateral agreements – 1 265 (2010) up to 3 590 (2020); Number of outbound mobile staff in accordance with bilateral agreements – 2 778 (2010) up to 5 438 (2020); Number of inbound

mobile staff in accordance with bilateral agreements – 2 685 (2010) up to 5 201 (2020) [28].

To synthesize, the performed case study has made it possible to outline the main objective for higher education lean management, which is to create a management system that would fully prevent errors and ensure the absence of inefficient work in the educational process, as well as contribute to the continuous development of twenty-first century skills of HEIs graduates. For this purpose, numerous techniques and tools for designing, implementing, evaluating and improving processes and the university management model should be used. Dedicated departments, teams, internal networks of change agents and other forms of co-operation for the improvement of the university culture are created. One of the conditions for the success of change is specialized trainings for employees and their involvement in improvement projects. A change in organizational culture takes place through a change in the attitude of each employee of the university. This requires the full involvement of university management at all levels and the provision of resources (material, information, human and financial) for the implementation of the cultural change programme and the university management model [10, p. 155].

The conducted research has made it possible to conclude that for students and university employees, lean management presents an opportunity to gain 21st century competencies, learn in-demand lean technologies, initiate own lean projects, gain skills in working in teams with a focus on specific results and continuous improvement. For HEIs, on the one hand, this is an increase in consumer satisfaction with the quality and timing of services, a reduction in the waiting time for a consumer to receive services, transparency of the organization of processes for consumers, standardization of pilot processes based on "best practices", formation of personnel competencies to quickly identify problems and eliminate them, identifying leaders among staff who are capable of making improvements based on a project approach. On the other hand, this type of management means saving time, resources, costs, increasing productivity, improving efficiency and quality of management, increasing competitiveness.

Among the perspectives of further research there are possibilities to recognize and give value to internationalization and employability as institutional endeavors that presuppose a fine-tuned coordination and continuum between and within study programmes, academic faculties and departments, and different support units. Apart from this, the possibilities to apply a mixture of curricular, co-curricular, and extra-curricular interventions, e.g. combinations of internship modules, practical courses and different teaching methods (project-based learning,

community-based learning, research-based learning, etc.); to create flexible space in the curriculum and support measures for enabling students to integrate and explicitly identify skills development within the curriculum or at the margins of it; to promote project-based and real-life-based teaching approaches that can also be useful for interdisciplinary international collaboration, and for involving partners outside the academic community, etc.

## REFERENCES:

1. Altbach P.G. The Internationalization of Higher Education: Motivations and Realities. *Journal of Studies in International Education*. 2007. No. 1. P. 290–305. DOI: 10.1177/1028315307303542.
2. Balzer W. Lean Higher Education – Increasing the Value and Performance of University Processes. New York : Taylor and Francis Group, 2010. 436 p.
3. Balzer W. A review and perspective on Lean in higher education. *Quality Assurance in Education*. 2016. No. 24 (4). P. 442–462. DOI: 10.1108/QAE-03-2015-0011.
4. Coelen R. Internationalization and Employability in Higher Education. London : Routledge, 2019. 286 p.
5. Drotz E. Lean in the Public Sector. Possibilities and Limitations. Sweden, Linköping : Department of Management and Engineering Linköping University Press, 2014. 62 p.
6. Fielden J. The Practice of Internationalization: Managing International Activities in UK Universities. UK Higher Education International Unit, 2008. 60 p.
7. Gerbery D. Labour Market Transitions and Their Determinants in Slovakia: Path from Crisis to Recovery. *Ekonomický časopis*. 2020. No. 68 (7). P. 651–676. DOI: 10.31577/ekoncas.2020.07.01.
8. Grudowski P. Stakeholders Satisfaction Index as an Important Factor of Improving Quality Management Systems of Universities in Poland. *Journal of Management and Finance*. 2015. Vol. 13. No. 2. Logožar : University of Maribor, Faculty of Economics and Business Press, 2015. P. 25–36.
9. Höfer S. The application of lean management in higher education. *International Journal of Contemporary Management*. 2017. No. 16 (4). P. 63–80. DOI: 10.4467/24498939IJCM.17.038.8261.
10. Hurley B. Growing a Lean approach in a changing university. Global Lean for higher education: A themed anthology of case studies, approaches, and tools. New York : Routledge, 2019. 450 p.
11. International Labour Organization. 2020. URL: <https://www.ilo.org/global/lang-en/index.htm>.
12. Jones E. Internationalization and employability: the role of intercultural experiences in the development of transferable skills. *Public Money & Management*. 2013. No. 33 (2). P. 95–104. DOI: 10.1080/09540962.2013.763416.
13. Kindsiko E. Career Patterns of Doctoral Graduates: Evidence from Estonia. *Trames-journal of The Humanities and Social Sciences*. 2018. No. 22. P. 105–112. DOI: 10.3176/tr.2018.2.01.
14. Knight J. Concepts, Rationales, and Interpretive Frameworks in the Internationalization of Higher Education. *The SAGE Handbook of Intercultural Competence*. SAGE Publications, 2012. 19 p.
15. Laredo Ph. Revisiting the Third Mission of Universities: Toward a Renewed Categorization of University Activities? *Higher Education Policy*. 2007. No. 20 (4). P. 441–456. DOI: 10.1057/palgrave.hep.8300169.
16. Lisowska A. Zarządzanie jakością w urzędach administracji publicznej. *Zeszyty Naukowe Uniwersytetu Przyrodniczo-Humanistycznego w Siedlcach*. 2012. No. 95. P. 87–93.
17. Maciąg J. How can an institution of higher education become lean? Methods of higher school restructuring. *Conference Papers Society for Research into Higher Education*. Newport, Great Britain, 2011.
18. Maciąg J. The determining role of organizational culture in the implementation of the lean management concept as exemplified by Polish universities. 2016. URL: <http://www.leanhehub.ac.uk/conference/former-hosts> (Accessed: 17 September 2020).
19. Maciąg J. Lean Culture in Higher Education – Towards Continuous Improvement. Wydawnictwo Palgrave Macmillan, 2019. URL: <https://www.palgrave.com/gp/book/9783030056858> (Accessed: 15 September 2020).
20. Mainardes E.W. An exploratory research on the stakeholders of a University. *Journal of Management and Strategy*. 2011. No. 1 (1). P. 32–39. DOI: 10.5430/jms.v1n1p76.
21. Marchwiński Ch. Leksykon Lean. Ilustrowany słownik pojęć z zakresu Lean Management. Wrocław : Wydawnictwo Lean Enterprise Institute Polska, 2010. 15 p.
22. McLaughlin K. New Public Management: New Trends and Future Prospects. New York : Routledge, 2002. 368 p.
23. Meeting skills and employability demands: Thematic Peer Group Report / P. McSweeney et al. Geneva : European University Association, 2021. 14 p.
24. Myhovych I. Internationalization Process as a Way to Ensure Quality of Higher Education in Ukraine. *Education and Pedagogical Sciences*. 2018. No. 1. P. 17–25. URL: [http://www.irbis-http://pedagogicaljournal.luguniv.edu.ua/archive/2018/2018\\_No1\(168\).pdf](http://www.irbis-http://pedagogicaljournal.luguniv.edu.ua/archive/2018/2018_No1(168).pdf).
25. Shattock M. Managing Successful Universities. Maidenhead : SRHE and Open University Press, 2003. 240 p.
26. Skill Shortage and Surplus Occupations in Europe. 2016. Briefing note. CEDEFOP. URL: <https://www.cedefop.europa.eu/en/publications/9115>.
27. Thomas A. Can Higher Education Lean Itself Up? Can the Further Education Sector Show Us the Way? *Proceedings of First International Conference on Lean Six Sigma for Higher Education*. 2013. Glasgow, Scotland, UK.
28. Uniwersytet Jagielloński w Krakowie: Dział współpracy międzynarodowej. 2020. URL: [https://dwm.uj.edu.pl/pl\\_PL/o-dziale/historia-dzialu2](https://dwm.uj.edu.pl/pl_PL/o-dziale/historia-dzialu2) (Accessed: 15 December 2021).
29. Uvalic M. Transition from University to Employment of Young Graduates in Serbia. *Social Exclusion and Labour Market Challenges in the Western Balkans*. Cambridge Scholars Publishing, 2020. P. 191–220.
30. Wiegel V. Lessons from higher education: Adapting Lean Six Sigma to account for structural differences in application domains. *International Journal*

of Six Sigma and Competitive Advantage. 2015. No. 9 (1). P. 72. DOI: 10.1504/IJSSCA.2015.070104.

31. Wiers-Jenssen J. Background and employability of mobile vs non-mobile students. *Tertiary Education and Management*. 2011. No. 17 (2). P. 79–100. DOI: 10.1080/13583883.2011.562524.

32. Woźnicki J. Uniwersytet jako kreacja instytucjonalna ambicji twórców i oczekiwań

interesariuszy. Kraków : Wydawnictwo Uniwersytetu Jagiellońskiego, 2014.

33. Zitt M. Big is (made) Beautiful Some comments about the Shanghai ranking of world-class universities. *The World-Class University and Ranking: Aiming beyond Status* / eds. J. Sadlack, N.C. Liu. Romania : UNESCO-CEPES, Cluj University Press, 2007. P. 141–160.