

2. Воронкова В.Г. Романенко Т. П., Андриякайтене, Регина. Концепція розвитку проектно- орієнтованого бізнесу в умовах цифрової трансформації до smart-суспільства/ В. Г. Воронкова, Т. П. Романенко, Андриякайте Регина // Гуманітарний вісник Запорізької державної інженерної академії, 2016.- № 67. - С.122-134.

3. Днепровская Н.В., Янковская Е.А., Шевцова И.В. Понятийные основы концепции smart-образования. [Електронний ресурс]. – Режим доступу: file:///C:/Users/pc/Downloads/65-126-1-SM.pdf.

4. Інтеграція вищої школи України до європейського та світового освітнього простору. – К.: «Вища освіта України», 2012. – 558 с.

5. Крайнік О. М., Трифонов В.А. Креативність як невід’ємний компонент інтелектуального розвитку особистості // Матеріали Міжнародної науково-практичної конференції 23–24 квітня 2018 року «Теоретичні і практичні засади еволюції від інформаційного суспільства до «суспільства знань» і до smart-суспільства: виклики і можливості четвертої промислової революції» / Ред.-упорядник: д.філософ.н., проф. В.Г.Воронкова. - Запоріжжя: Вид-во ЗДІА, 2018.- 292 с.

6. Сергієнко Т.І., Лобань С.І. Принципи SMART - освіти в суспільстві в ХХІ столітті // Матеріали Міжнародної науково-практичної конференції 23–24 квітня 2018 року «Теоретичні і практичні засади еволюції від інформаційного суспільства до «суспільства знань» і до smart-суспільства: виклики і можливості четвертої промислової революції» / Ред.-упорядник: д.філософ.н., проф. В.Г.Воронкова. - Запоріжжя: Вид-во ЗДІА, 2018.- 292 с.

STRUCTURAL REFORM OF INTERNATIONALIZATION OF ODESA NATIONAL POLYTECHNIC UNIVERSITY IN THE EXPERIENCE OF THE TEMPUS-IV "PICASA" PROJECT

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The paper describes the tendencies in the development of the internationalization of higher education by the example of the structural transformations of the internationalization processes of the Odesa National Polytechnic University within the framework of the TEMPUS-IV PIKASA project. The approaches to the development of the internationalization strategy of the university, the approach to measuring the internationalization of the MINT, implemented within the framework of the curriculum change project, which are aimed at the internationalization of these programs, are considered. The review of the main stakeholders of the TEMPUS-IV PIKASA project
Keywords: internationalization, higher education, structural reform, internationalization strategy, MINT approach

In 2015 in Ukraine was implemented the new higher education Law, that in accordance with a new challenges provide new abilities for revision academic programs and curriculums, were revised issues of internationalization, students and staff mobility, procedures of renovation become simpler.

In the same time in Odesa National Polytechnic University (ONPU) was launched implementation of activities project TEMPUS-IV PICASA, considering to the project main objectives, it was approval process of new internalization policy and revising of 2 academic programs.

Thereby Odesa Polytechnic University one of the first in Ukraine implemented a new methods and procedures in accordance with the New Law, among which a new internationalization policy plan, where were defined all direction of University's internationalization in accordance with University's strategic plan 2010-2020, new procedures on administrative level, and a new internationalized measures in academic programs and curricula.

The internationalization policy plan, approved by the Academic Council of the University, is based on a strategic plan and consists of 3 main sections: short-term, medium-term and long-term planning.

The main prerequisites for organizing a successful functioning of the planning system are as follows:

- Staff. Include the willingness of management to manage within the planning system based on clearly defined objectives and management principles. The choice of goals and the identification of ways to achieve them are directly included in the planning process
- Organizational. An organized organizational planning mechanism is needed. The management bodies and organizational units that form the planned and organizational pyramid, respectively, must overlap each other.
- Methodological. The system of plans, the established methodology for their development and the experience of their application. Most universities independently develop planned methodological documentation, including specific forms, terms of approval and implementation, controls, etc.
- Information. The availability of effective tools for the collection, processing and transmission of planning information.

For revising of academic programs were selected two programs in accordance with the most demanded directions in Ukraine: the first is in area IT-engineering, and the second is in area Economics.

In the process of academic programs internationalization were used recommendations from the leading Universities of Europe and UK, also was implemented MINT (Measurement of internationalization) approach for self-assessment and analysis, that allowed implement quality assurance tools in program development.

MINT approach is based on the mapping of the current state based on an approved set of indicators. The main sections are next:

- Section 1. Policies and goals of internationalization

- Section 2. Internationalization of activities
- Section 3. Services of internationalization support
- Section 4. Key indicators of internationalization
- Section 5. The Results of Internationalization

Total sections contain 138 fields for filling and reflect 68 generally accepted key indicators of the internationalization of the university.

The pilot programs were introduced the following changes - were expanded international graduates' competences, set priorities and emphases in accordance with the new internationalization policy, expanded set of disciplines on foreign languages, in particular on English, as the first international language.

Also in programs were revised students' mobility issues, were optimized procedures in accordance with ECTS, and was arranged mobility of incoming and outgoing lecturers, was created internet profile of each program – own international website, pages on popular social networks, it helps arrange extracurricular dialog with all stakeholders, as graduates, employers, etc. on the program area.

Based on the gained experience have already connected several departments with its leading programs to revise them in accordance with the new principles of internationalization. Also is holding work for creation of MINT self-assessments for all the university departments.

Implementation of new elements in the curriculum also requires a quality assurance provision. It can be implemented as on basis of the existing standards, as ISO 9001:2009, as on the basis of proposed by the MINT approach, as Deming method.

Results of the implemented changes will show main pros and cons, which helps in choice of emphasis for the future curriculum development.

Thus curriculum development through the implementation of internationalization components allows reaching a new level of opportunities as for the students as well for the departments and whole university.

According to the approach of the MINT, regular cyclic work is planned to measure existing key indicators and implement the strategic objectives of the internationalization plan, as well as assessing the quality of its implementation.

The implementation of the MINT approach provides the university with the implementation of a roadmap for structural transformation and implementation of the strategic development plan for the university.

Four Ukrainian universities, Kiev National University name after Taras Shevchenko, Chernivtsi University named after Yuri Fedkovych, National Metallurgical Academy of Ukraine in Dnipro, and Odesa National Polytechnic University took part in the project and successfully implemented this approach, prepared recommendations for the Ministry of Education of Ukraine and quality control agencies for the development of appropriate tools for influencing other structures of higher education in Ukraine.

REFERENCES

- 1 Adinda van Gaalen, Nico Evers. [Online] The organization for internationalization in education. Available at: <http://www.epnuffic.nl/en/internationalisation/quality-assurance/mapping-internationalization-mint> (2014)
- 2 . The Law of Ukraine about the higher education. [Online]. Information portal about Higher education in Ukraine and abroad. Available at: <http://vnz.org.ua/zakonodavstvo/111-zakon-ukrayiny-pro-vyschu-osvitu> (2015)
- 3 . Adinda van Gaalen, Nico Evers. [Online]. Quality assurance for internationalization in education. Available at: <http://www.epnuffic.nl/en/internationalisation/quality-assurance/mapping-internationalization-mint/background-information> (2016)
- 4 . Uwe Brandenburg, Gero Federkeil. [Online]. How to measure internationality and internationalization of higher education institutions. Indicators and key figures. Available at: http://www.che.de/downloads/How_to_measure_internationality_AP_92.pdf (2009)
- 5 . Norio Furushiro. [Online] Research on the development of evaluation criteria for the analysis of internationalization of universities. Available at: <http://www.gcnosaka.jp/project/project-finalreport.html> (2006)
- 6 . H el ene Vanbrabant, Rosette S'Jeegers, Micha el Joris and Jan Geens. [Online]. Quality Indicators of Internationalization. Available at: <http://www.eposvlaanderen.be/?CategoryID=374> (2008)

МІЖНАРОДНЕ СПІВРОБІТНИЦТВО ОДЕСЬКОГО НАЦІОНАЛЬНОГО ПОЛІТЕХНІЧНОГО УНІВЕРСИТЕТУ В УМОВАХ ІНТЕРНАЦІОНАЛІЗАЦІЇ ВИЩОЇ ОСВІТИ

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Процес глобалізації викликає потребу в професійних кадрах нового рівня. На даний час рішення цього завдання зв'язується з інтернаціоналізацією освіти. Головною складовою частиною процесу інтернаціоналізації є академічна мобільність, тобто участь студентів, викладачів і співробітників в програмах обміну, міжнародних науково-дослідних проектах, а також створення спільних навчальних програм, організація інтенсивних курсів і літніх шкіл для іноземців і т.п.

Ключові слова: Міжнародне співробітництво; Одеський Національний Політехнічний Університет; інтернаціоналізація вищої освіти; стратегія розвитку закладу вищої освіти; академічна мобільність.