

CHALLENGES OF THE DUAL STUDIES MANAGEMENT: THE CASE OF UKRAINE

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The shift to the knowledge-based economy and fast technological development put pressure on higher educational institutions with regard to the modernization of curricula, providing possibilities to overcome the skill gap and finding new tools for ensuring the quality of education services that correspond with the labor market needs. The purpose of the paper is to present the analysis of challenges and results of a currently piloted tool – dual studies – based on best German applied education practices. Authors investigate formal and informal obstacles for the introduction of this innovation in the national context, as well as solutions and potential benefits. The latter are social (decreasing the graduates' unemployment level), economic (providing the labor market with well-educated labor force equipped with relevant qualifications) and individual (image improvement of companies, advancement of higher educational institution competitiveness and financial support of students, as well as smoothening the shift to the world of work) both short- and long-term. However, despite clear positive socio-economic effects, the dynamics of dual studies introduction as an innovation by stakeholders is far from optimistic due to the unfinished process of the formation of approaches to the dual studies management, which undermines the development of cooperation networks of the three key stakeholders – a higher educational establishment, a company and a student. There is also a current need in updating teaching methodologies, development of new relevant educational programs, curricula, modernization of the content of pre-tertiary and tertiary professional education based on an integrated approach and dual education principles. With regard to the above-listed tasks to be solved and despite a number of structural obstacles, the dual form of education is being implemented in Ukraine, which adds up to building social partnerships between educational institutions, students and employers.

Keywords: *dual studies management, skill gap, human capital investments, higher education modernization.*

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INTRODUCTION

The dual studies as an innovative approach of cooperation between the higher educational institutions and companies appeared in Germany in 1972 with the piloting of the so-called “Stuttgart model”. Though the philosophy is close to the earlier established USA co-operative studies, Germany has built flexible and comprehensive dual studies management system, which is believed to be one of the factors of country’s strong economy. The evolutionary formed framework for employers’ engagement into student education and training allows

flexibility of models and regulations of parties' obligations with no harm done to the quality of education. This nature of the dual studies management establishment in specific environment prevents its easy "export" into other national contexts requiring adaptation in each particular case. Ukraine started examining possibilities of its adaptation in 2013 and experimenting with the introduction of the dual studies management elements already in 2014. However, it takes considerable effort to establish partnerships of educational establishments and companies, companies and students. The article is generalizing the experience of the three key stakeholders with regard to the dual studies management introduction defining obstacles to its domestic development and offering solutions.

LITERATURE REVIEW

Dual form of tertiary education is a way of obtaining education by day-students, which provides on-the-job training at enterprises, institutions and organizations regulated by contractual relations aimed at acquiring a certain qualification, the scope of which should not be lower than 25% or exceed 60% of the total educational program.

The topic of dual studies in the structure of labor force education and training has not been deeply studied by Ukrainian scientists despite its strategic importance. However, benefits from the implementation of the dual form of education have been precisely described by M. Kuchinsky, who emphasizes its potential important role in obtaining specialized (professional) secondary education, ensuring students' own educational trajectories and smooth transfer of young people into the labor market [1, p. 8]. A. Lutska draws attention to the lack of preconditions for the development of dual education such as sufficient regulatory framework and the interest of employers in its implementation [2, p. 9].

The essences of the German dual education system and Ukraine's first steps on the way to its implement have been presented in the articles by T. Pyatnychuk [3, p. 27–31]. The unresolved issues of dual education introduction have been studied by K. Kudrya and O. Stalinskaya quite rightly include the creation of institutional incentives for the assessment and application of dual education in enterprises to important tools of professional education development [4]. The practice of dual education in Germany and Ukraine in the context of professional standards was analyzed by V. Novikov [5]. I. Kalenyuk's researches also deserve special attention being devoted to the analysis and application in Ukraine of the international best practices of professional education development [6].

OBJECTIVES OF THE ARTICLE

The purpose of the article is to present the analysis of challenges and attitudes to a currently piloted tool – dual education studies – based on best German applied education practices - and to study main motivations of stakeholders to introduce and support dissemination of this new form of education.

DATA AND RESEARCH METHODOLOGY

Following the research on the results of the first year of the experiment of dual studies introduction in Ukraine conducted by the Friedrich Ebert Foundation Office in Ukraine and Scientific-methodological center of pre-tertiary and tertiary education under the auspices of the Ministry of Education [10-12], the authors of this article have conducted a survey among Ukrainian dual education stakeholders – higher educational establishments, companies and students - regarding attitudes to and perspectives of such innovation. The study has been done in three stages: 1. April - May 2020 p. – cabinet study and development of a questionnaire; 2. June – August 2020 p. – data collection through Google-forms service; 3. September – November – data analysis and report preparation.

Table 1. Sampling

Stakeholders	Number of stakeholders contacted	Number of stakeholders, who provided answers	Response rate
Representatives of higher educational establishments	400	187	0,46
Employers (representatives of companies)	400	68	0,17
Students	400	314	0,78
Overall	1200	569	0,47

RESULTS

Being a developing economy Ukraine is interested in any instruments available to join the cluster of the developed countries [20]. One of such instruments is precise investments in human capital, which among other tools can be assured by dual studies management. With regard to the chosen EU-integration pass, cooperation in a variety of sectors, including the educational one, it is beneficial for Ukraine to exchange and adopt best European practices, including in the sphere of education.

Thus, since 2013, Ukraine has been paying a lot of attention to the German dual education system both on the level of vocational and higher education. Dual tertiary education appeared in response to a lack of skilled labor force in the land (Baden-Württemberg) and initiated by three companies - Daimler-Benz, Bosch and SEL. As an alternative to the traditional tertiary education, it offered extensive professional experience already before graduation combined with academic study.

The launch of Ukrainian experiments with dual studies management adaptation was motivated mainly by the same reason – unsatisfied need of employers in qualified young labor force. Taking into account that the existing approaches to cooperation between higher educational institutions and companies did not result in overcoming the skill gap or the rise in the level of employers’ satisfaction with graduates’ readiness to the world of work, the Ministry of Education and Science of Ukraine has supported the initiative of a number of stakeholders to adapt German dual education pattern [20-21]. Thus, it is important to study the three key stakeholders’ attitudes, motivations and opinion as of obstacles for dual studies development, as they are the main beneficiaries, as well as key implementers of the initiative.

The survey results have demonstrated that there is a clear need in ensuring a balance between the labor market demands\expectations and the “product” of education service providers, which underlines the need to offer a new mechanism for cooperation between the parties.

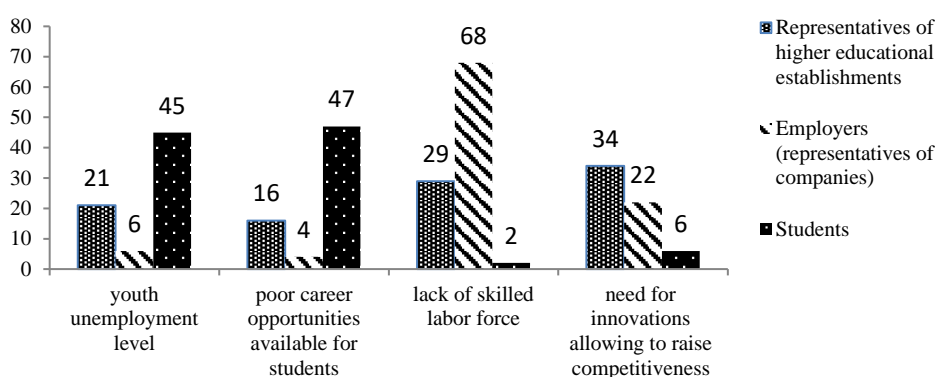


Figure 1. Opinion of the three key stakeholders as of main reasons of dual studies introduction, (%)

In the field for comments the respondents have noted that they see benefits of the dual form of education in a unique symbiosis of educational and practical (on-the-job training) component, which allows:

- overcoming a skill gap;
- access to real/modern production processes and technologies;
- reduction of time for adaptation of young employers;
- getting financial support, when being a student.

Special attention should be paid to the factor, which requires additional research, namely the waste of students' potential due to engagement into performing work on the jobs not related to their field of studies with the aim of getting financial means for a living.

Ukraine shows a clear trend of demand for higher education among population.

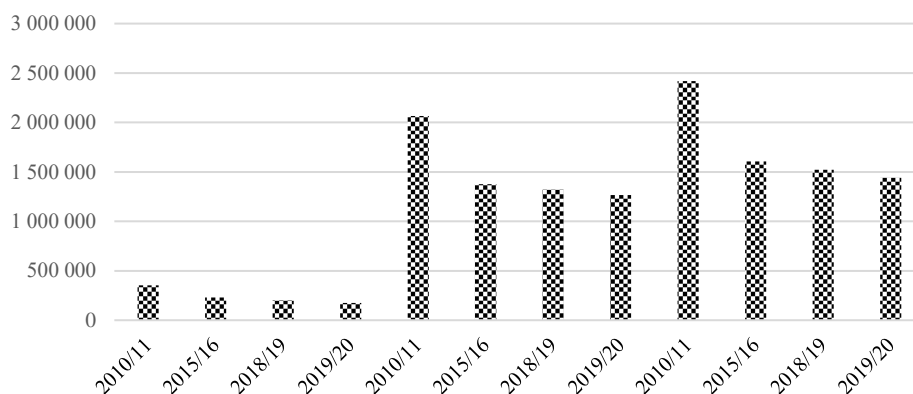


Figure 2. Number of students of Ukrainian higher educational establishments

The comparison of these numbers with the structure of sources for covering the education costs for the period of 2010-2019 a.y. (Table 2) demonstrates that the state is investing a lion share into human capital, when it comes to education sphere. Thus, dual education may increase the return on investment, if applied properly.

Table 2. Share of higher education students (%) disaggregated by the sources of financing

Sources of financing for covering education costs	2010/11	2015/16	2018/19	2019/20	2010/11	2015/16	2018/19	2019/20
state budget	36,3	36,0	13,5	5,9	38,6	47,2	43,1	42,3
local budgets	21,8	28,1	52,6	63,2	0,7	1,1	1,0	0,9
legal entities	0,1	0,3	0,0	0,1	0,4	0,7	0,5	0,2
individuals	41,8	35,6	33,9	30,8	60,3	51,0	55,4	56,6

However, despite the benefits of dual studies, stakeholders see a number of obstacles preventing dissemination of this innovation, which have formal, economic, historical and attitude-related background.

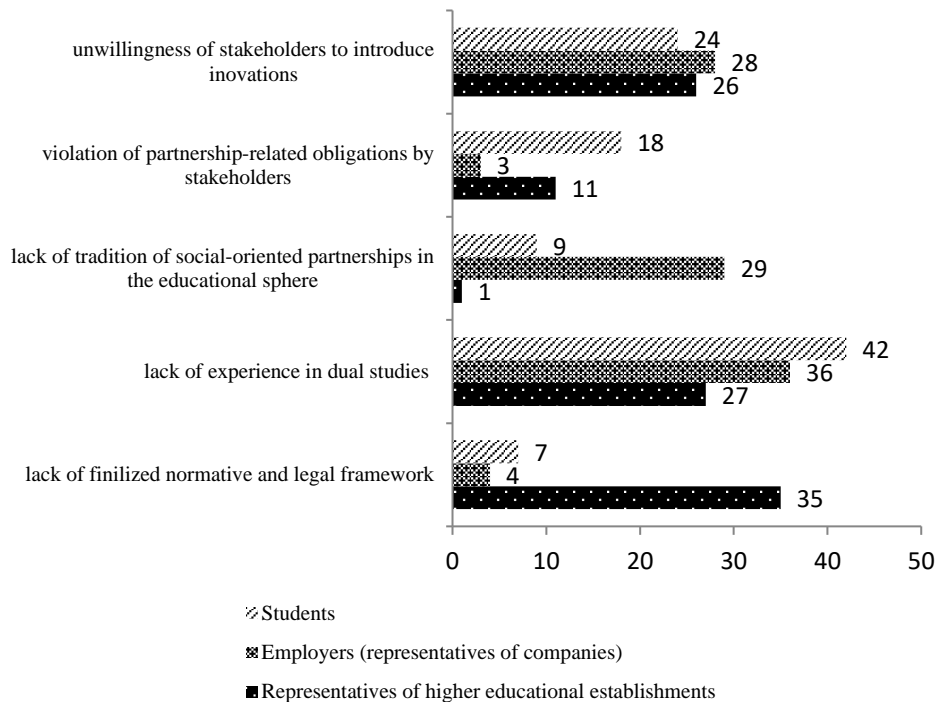


Figure 3. Opinion of the three key stakeholders as of main obstacles to dual studies introduction (%)

Respondents explained their stand in the comments, stressing that though educational establishments and enterprises have been cooperation in different forms for almost a century on the territory of the current Ukrainian state, the framework and “rules of the game” of such cooperation have been changing a lot. In other words, previous formats of cooperation on educational establishments and employers cannot and should not be considered as “same as before”. Thus, time is needed for establishment of understanding of the dual studies concept and networks of stakeholders for wider dissemination of this innovation. This should create the ground for non-violation of parties’ obligations and building of trust between all the parties. It is interesting to note that these are higher educational establishments that see lack of finalized normative and legal framework as an obstacle for dual studies introduction. Taking into account the wide scope of rights that higher educational establishments have obtained in the framework of University autonomy reform, this argument may be considered as an excuse rather than the real reason for their passive stand.

According to the above mentioned research on the results of the first year of the experiment of the Ministry of education and science of Ukraine [11], the number of stakeholders involved into piloting of duals studies is objectively small.

Table 3. Number of stakeholders involved into the dual studies piloting in the framework of the Ministry of education and science experiment (2019-2020 a.y.).

	Higher Educational Establishments	Employers	Students
Number of stakeholders involved into dual studies introduction	17	100	441 (123 f. and 318 m.)

Thus, it was important to find out if respondents themselves are ready to get involved into dual studies taken all the above mentioned benefits and obstacles.

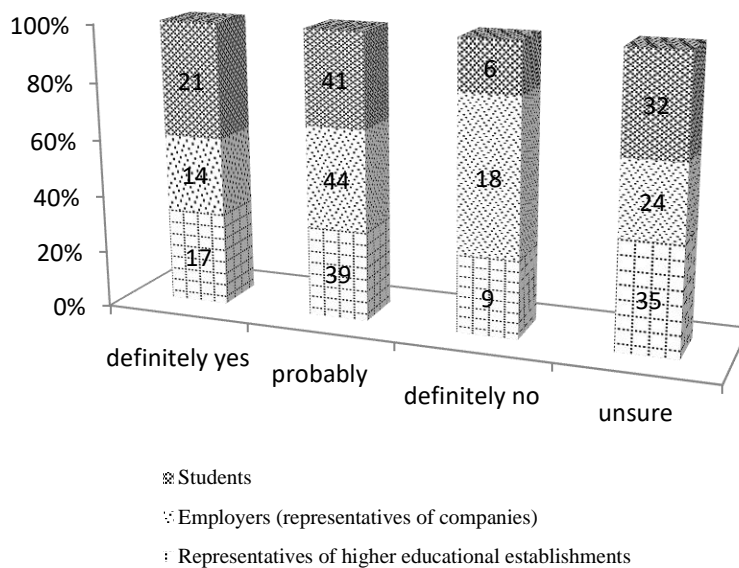


Figure 4. Share of the key dual studies stakeholders ready to participate in dual studies introduction (by groups, %)

CONCLUSIONS

Thus, results of the cabinet study research and the study of key dual studies stakeholders' opinion, it is obvious that dual studies introduction is possible into the national context, despite clearly defined obstacles.

The main reason that may motivate stakeholders to consider participation in the introduction of the dual studies in Ukraine is the lack of young labor force with relevant qualifications, along with the chance to increase chances for first employment and career opportunities. Among other important issues that dual studies may add to resolving are:

- improving the quality of practical (professional) training;
- financial independence gained by means of engagement into the academic study-related work;
- early adaptation and better orientation in the world of work.

Introduction of dual studies also create favorable conditions for updating teaching methodologies, develop new relevant educational programs, modernize the design and content of professional higher education based on an integrated approach.

However, there are a number of problems that currently constrain the engagement of stakeholders into the introduction of the dual form of education in Ukraine:

- lack of finalized normative framework;
- lack of relevant experience of such partnerships and low social-orientation of business;
- general low motivation for change among stakeholders, especially higher educational establishments etc.

All-in-all, the challenges faced by the key stakeholders as of dual studies management introduction are of a complex nature influenced by historic, economic, bureaucratic and cultural factors. One of the ways to support the introduction of this innovation is the development of a comprehensive and well-facilitated long-term national level strategy, on the one hand, and facilitation of precisely targeted grass-root initiatives of higher educational establishments and companies willing to deal with dual studies management based not on a formal approach, on the other hand. Though, the introduction of the dual studies management is believed to boost economic development in the long-run being an instrument of investments in human capital, the scope of its diffusion greatly depends on the current state of regional and national economy - in other words, it is a two-way street. This should be taken

into account, when developing the strategy for stakeholder cooperation network establishment and negotiating the obligations of the parties. Altogether, the factors determining the current path of domestic efforts on the dual studies management introduction demand searching for the ways of adaptation international best practices and not their mere copying.

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Бабенко В.О., Шиловцева Н.В., Лаптева А.Ю., Походенко Б.О., Самоїленко Г. Т. Виклики управління дуальною освітою: кейс України

Перехід до економіки, заснованої на знаннях, і швидкий технологічний розвиток чинили тиск на вищі навчальні заклади в плані модернізації навчальних програм, надаючи можливості для подолання дефіциту навичок і пошуку нових інструментів для забезпечення якості освітніх послуг, що відповідають ринку праці потреби. Мета статті - представити аналіз проблем і результатів випробувань в даний час інструменту - дуальних досліджень, - на основі кращих практик німецького прикладного освіти. Автори досліджують формальні і неформальні перешкоди для впровадження цієї інновації в національному контексті, а також рішення і потенційні переваги. Останні бувають соціальними (зниження рівня безробіття випускників), економічними (забезпечення ринку праці добре освіченою робочою силою, яка має відповідну кваліфікацію) і індивідуальними (поліпшення іміджу компанії, підвищення конкурентоспроможності ВНЗ і фінансова підтримка студентів, а також згладжування переходу до світу праці) як в короткостроковій, так і в довгостроковій перспективі. Однак, незважаючи на явні позитивні соціально-економічні ефекти, динаміка впровадження дуальних досліджень як інновації зацікавленими сторонами далека від оптимізму через незавершений процес формування підходів до управління дуальними дослідженнями, що підриває розвиток коопераційних мереж країн. три ключових стейкхолдери - вищий навчальний заклад, компанія і студент. Також існує загальна потреба в оновленні методик навчання, розробці нових актуальних освітніх програм, навчальних планів, модернізації змісту довузівської та вищої професійної освіти на основі комплексного підходу і принципів дуального освіти. З урахуванням перерахованих вище завдань, які необхідно вирішити, і не дивлячись на ряд структурних перешкод, в Україні впроваджується дуальна форма навчання, що сприяє побудові соціального партнерства між навчальними закладами, студентами та роботодавцями.

Ключові слова: управління дуальним навчанням, дефіцит навичок, інвестиції в людський капітал, модернізація вищої освіти.