Chapter 9 Prospects for the Implementation of PracticeBased Learning for Students of Managerial Profile

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ABSTRACT

The purpose of the study is to highlight the theoretical and practical aspects of implementing practice-oriented training of management students and to develop a descriptive model of internship based on innovative approaches. The study highlights the theoretical and applied aspects of the practice-based education implementation for management specialists. Achieving the study goal contributed to the use of several methods of scientific knowledge, in particular theoretical (analysis, synthesis, induction, deduction), empirical methods (observation, questionnaires, surveys), the method of

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experimental work, as well as tabular and graphical methods. The basic parameters of the practice-based education model were substantiated and determined. They provide the student's participation in educational and professional internship, performing official duties during one academic year. The main components inherent in the practice-based education model that distinguish it from the traditional process of practice within the framework of the generally accepted educational model were analyzed.

INTRODUCTION

The modern university educational process requires the establishment and observance of a reasonable learning structure: 1) academic theoretical education; 2) education at the university whose work is grounded on developing interactive methods, casemethod, situational and estimated and analytical tasks; 3) industrial practice. The two latter develop a base for practice-based education which role as an obligatory component of educational process in higher school has recently increased substantially. Educational reform in universities training managers has intensified the innovative efforts to implement practice-based education. However, because of the lack of relevant experience and efficient models adjusted, higher educational establishments faced up to the series of organizational and methodological challenges which prevented from successful spreading of this experience.

According to the authors, the introduction of a practice-based education model, which provides for the student to stay in office and perform their duties for a long period of time, should be identified as a component called educational and professional internship (EPI). So far, the relevant practice does not have sufficient methodological justification and needs to be studied by scientists, practitioners and institutions that ensure the development of modern models in the educational process. The growing demands for the modern management specialists training require the use of innovative dual education practices. There is a reel need to introduce a new model of training, where the practice-oriented component acquires a fundamentally new quality.

LITERATURE REVIEW

The term Practice-Based Education (PBE) concerning higher educational establishments is used in the study by Sheehan and Higgs (2013); it means preparing alumni for fulfillment practical tasks, challenges, goals which are relevant to the sphere of their professional activity. Practice-Based Education is actualized according

to the educational program which sets goals, strategies, criteria of estimation interaction and preparation for practice. This form of education combines three kinds of trainings: local (social), training through experience (at a workplace) and professional training.

The work by a group of scholars (Higgs et al. 2012) is grounded on collective vision, research, knowledge and experience of profound scientists in the sphere of professional education and training. Their study represents different viewpoints and critical assessment of this important trend in higher education, alongside with consideration the strategy of implementing the demanding and motivational way of education, teaching, and developing educational programs.

In medical and pharmaceutical education and training as well as in those concerning pedagogy, practice-based education has long been used. Among the relevant works should be mentioned those of Ilich (2017), Chuenjitwongsa, Oliver, and Bullock (2018), Epsteinand, and Hundert (2002), Edelbring, Dahlgren, and WieglebEdström (2018), Conroy, Hulme, and Menter (2013), Greenberg, Putman, and Walsh (2014).

Project-based education model was proposed by the scholar Morgan (1983). Project-based way was identified as "...an activity in which students develop understanding of topic through involvement in actual problem or issue and notes models of project work whereas they bear a responsibility for arrangement of the whole educational process". The idea was supported by other scholars, Cardona, Velez, and Tobon (2016), in particular, who proved that model of practice-based education grounded on project-based platform promoted education efficiency with the use of application sociological survey and correlation analysis methods.

The practice of strategic management spreading with the help of games became popular in the world (Knotts, and Keys 1997). Managerial games are applied in educational processes assisting students to integrate functional knowledge into business sphere, as well as provide with practical awareness of strategical management. Managerial games give the valuable experience in development teamwork skills. The tactics chosen by the instructor is significant for success, considering the fact that the teaching game-oriented courses require more skills than those focused on lectures or specific issue.

Salasa et al. (2017) consider the simulation-based training (SBT) to be the best approach for management education, and in an effort to guide and encourage its appropriate use they provide several practical guidelines regarding best implementation of simulation-based training in the classroom.

The issue of management modeling, games and simulation-based education occurred in the works of Adobor, and Daneshfar (2006), Bell, Kanar, and Kozlowski (2008), Lean et al. (2006).

Educational technologies implementation which spread rapidly requires professionalism and manager willingness to introduce innovative informational

technologies. Thus, according to Stupak (2020), use of e-based resources (WebQuest, e-quizzes and online games) in higher education may provide both the development of professional skills and those concerning gaining online environment use experience. She proposes the use of interactive online-games grounded on online-platform Goosechase. Glowacki, Kriukova, and Avshenyuk (2018) shares her viewpoint and regards gamification as innovative approach in higher education. The researchers analyzed the use of gamification in higher educational establishments of Poland and Ukraine, as well as studied the efficiency of Kahoot application as one of gamification technologies. At the same time appeared the following set of social risks: new social policies in the sphere of higher education, digitalization of education, spread of clip-thinking and internet-addiction among students.

The results of Baker Oam (2017) study has the great value for practice. It reviews education and training provision in Australia through a contextualisation of the Australian Qualification Framework (AQF) with work-based learning (WBL) pedagogy to determine how it can improve students learning results. According to the scientist, the application of effective WBL approaches has the potential to create a much larger flow of learners from experiential and vocational backgrounds into undergraduate programmes and onto higher education programmes using a consistent and effective pedagogy. Considering active on-the-job training opportunities, students, teachers, and business managers recognize that the demand for on-the-job training will be higher.

Another practice-based model which has great scientific and practical interest - problem-based learning (PBL). According to the model teachers should educate students how to research and create relying on natural instincts. It was realized in practice in the 1960s in McMaster University (official website, as of March 15, 2021) for the first time, then it was applied in Monash University (official website, as of March 15, 2021) for Bachelor of Medicine program and aimed at arranging the educational process to encourage students to think and make conclusions based on practical experience. Later this approach was applied to other specialties, including Math, Law, Pedagogy etc.

Billett (2001) proposed complete practical model which was well explained in theory and studies to manage work-based learning. His book publication made WBL mature model, as the scientist presented the way to a new level of complexity in approaches to learning and work. That promoted the creation of a lifelong learning concept.

Among Ukrainian scientists who were involved in relevant studies should be mentioned Gorbenko (2015). She identified four approaches to practicebased education:

- 1) educational, productive and internship practice organization for students to obtain real professional skills according to their profile.
- 2) career guided educational technologies which implementation enable students to shape personal characteristics that have actual importance for future professional activity, as well as knowledge, skills and experience securing qualitative professional duties performance according to the profile.
- 3) creating professional employment innovative forms for students to solve actual scientific, practical, productive, and exploratory work according to the profile.
- 4) designing conditions for learning, obtaining skills and experience aimed to shape student's motivation to acquire professional skills during the time of studying at the university.

Dolzhenkovet al. (2020) emphasizes the necessity of practice-based education dominance while preparing education managers. Her study stresses the need to use the information-factual base of reasonably expected situations in the future education managers learning, since it promotes the development of higher education recipients' abilities, the creation of conditions for their active, fruitful educational and cognitive activities and provide creative use of organizational forms and methods.

A hypothesis implies that a future managers' training is more successful if a practice-based education is implemented. A study by Prescott et al (2021) found a negative effect of practice-based education on academic achievement. The authors concluded that teachers and administration had failed to create a practice-based education model that would provide beneficial effects. Therefore, our research is dedicated to solving this problem. Proposed approach to practice-oriented education should be effective in the presence of such a component as holding office and performing official duties for a sufficiently long period of time. It is also important to choose the right optimal scenario educational and professional internships (EPI).

Therefore, students at the final stage of training should work in one of the positions provided by the specialty educational and professional internships (EPI) program. Based on the results of the students` work, they should be given the opinion of the EPI base commission on the compliance of his training level.

The purpose of the paper is to develop a practice-based education model and to describe possible scenarios of educational and professional internships (EPI) for students majoring in 073 "Management" at the university level of bachelor's degree.

Table 1. Questionnaire for an intern at the start of EPI.

1.	Which of the business activity directions in the organization may you be interested in? (variants: 1- have no interest, 2- have little interest, 3- may be of interest but I have lack of experience in this work, 4- have some interest, 5- have a lot of interest		
2.	Have you prepared a coursework, a paper or a project for a contest on one of the directions proposed? 1 – never prepared, 2- a paper for practical course (seminar), 3- in the process of preparing, 4- prepared a coursework or a project work for a contest, 5- is the theme of my qualification Bachelor's thesis		
3.	What does your scientific head at the university department think? 1- objects to the directions chosen, 2- has not come up with the decision, 3- is eager to accept the idea of the training base organization, 4- advises on the choice, 5- emphasizes the choice of the direction		
4.	Would you like to focus on one of the profiles (directions) after having passed all the stages of the profile? 1 – no, I would rather pass all stages of EPI equally well by all the directions, 2-I need some time to get familiar with the specificity of training base organization, 3-I have a wish but I do not select the direction among the several ones, 4-I am determined but need some advice, 5-I clearly determined		
5.	Would you like to focus on project approach? 1 – No, I would pass all EPI stages equally well in all directions, 2- No, I have chosen the option focusing on one direction, 3- I need some time to get familiar with specificity of training base organization 4 – I have the wish but I so not select the specific project, I consider several options, 5- I am clearly defined.		

Table 2. Questionnaire for a representative of the EPI base organization for an intern

1.	Which of the directions should be given more attention while arranging EPI? 1 – I cannot define, 2- I can recommend only if I consult with the university representative, 3 – I can define the priority direction for the organization, 4 – I accept the direction chosen, 5- I recommend another direction		
2.	Is it a good idea for an intern to plan equally all directions or would it be best to focus on one and study it deeply? 1 – I consider passing all stages equally without assigning the specific one, 2- the final decision should be made after two months of EPI, 3- I can recommend without emphasizing, 4- the direction should be identified specifically, 5- I consider identifying two and more directions		
3.	Do you recommend the project approach for practical part of EPI? 1- No, organization is not into such projects, 2- Possible, if it is developed in cooperation with the university, 3- The choice is based on intern's training results after one's cooperation with organization employees, 4- I can offer a chance to participate in a specific project, 5 – Yes, I can offer the participation in several projects		
4.	What are the chances of granting authority to an intern of EPI? 1- I can offer the training in organization subdivision witho any powers, 2- The interns' powers depend on their skills and knowledge, 3 - empowering is considered but needs consulting at the organization, 4- decision is made, 5- The intern is empowered with some responsibilities and duties		

Methods

Research Model/Design (Qualitative, Quantitative, or Mixed Methods)

The research is based on the mixed method, it comprises quantitative and qualitative data. According to the research objectives, the survey has been chosen as a quantitative method of the empirical research.

The authors developed a survey-based approach to the most reasonable solution to the choice of internship model. Before internship start such questionnaires are responded by both an intern and a representative who supervises the training from the organization which will be a base of EPI (Table 1).

The further questionnaire is proposed to be responded with the participation of representatives of EPI base organization which will supervise the intern (table 2).

The intern and a supervisor from the organization give one of the five possible responds while being questioned.

After receiving the questionnaire results and considering interests of all parties the constituent meeting is held in the presence of managers from the EPI base, from the university, as well as the future intern in order to adopt the EPI model. It is important to evaluate the results of the EPI and form a conclusion about the students` readiness to work in the chosen specialty. To achieve this the estimate commission is arranged:

- 1. Head of EOT;
- 2. Head from the university department;
- 3. Supervisor from the subdivision organization the intern trains;
- 4. Representative of the staff or trade union;
- 5. Representative of the organization executives.

Each member of assemble answers the questionnaire with the following question: Is the intern's level sufficient to perform professional duties in accordance with the acquired specialty?

Options: 1 – No, the level of knowledge and preparation does not correspond to the requirements for this occupation, 2 – after obtaining the qualification the person needs EPI training for several time before applying for the post on trial, 3 – the person may be applied for the low rank post according to organization chart, 4 – in general the person meets the requirements and may be employed for some posts, but non-managerial position, 5 - Yes, it is relevant to the requirements of the specialty and may apply for any post.

The evaluation commission conclusions have an advisory nature on the assignment of the relevant educational qualification and are officially submitted to the examination commission, where the bachelor's qualification work is defended.

The application of comparison, classification, systematization methods allowed to compare the new model of practice of training specialists in management introduction as a component of dual education with existing practices of training specialists in other fields; to identify the advantages and disadvantages of using different EPI scenarios for training.

Methods of diagnosis and experiment helped to determine the factors of the new model of practice-oriented internship, the development of stages of its implementation.

After going through each stage of EPI training students were offered to evaluate the matching level of their knowledge and skills to the post they were employed while performing EPI tasks. Block "Current level" was made for defining the present

level of skills obtained and had 5-grade scale. Block "Necessary level" was made for assessing the skills specific workplace required.

Data Analysis

Future managers survey was performed in both - the paper questionnaires and Google Forms. It made possible to do manual and automated processing of the received data. It should be stressed that automated one significantly speeds up the result processing that indicates the feasibility of using Google Forms.

EPI covers four stages of production practice: specialty, project, management, and internship. Such sequence is explained by the following.

The main task of the first stage (duration 4 weeks) is to work out in a specific unit and at a specific workplace all the details and nuances of the selected task for which the project solution should be prepared. Upon completion of this stage, the intern should know the specifics of the chosen area, its features of implementation at the enterprise; understand the potential and have a vision of ways to solve problems; be ready to participate in the task implementation.

At the next stage, student chooses together with the enterprise and the university leaders the project that meets the needs of the base and the interests of its management, coincides with the profile of the university tutor's research interests, and, what is very important, is interesting for the student and is based on his experience of coursework and his researches. After 14 weeks of EPI student should get acquainted with the work of the practice base. Minimum a week student should have practice in departments of different directions; determine the most urgent tasks for the further enterprise activity and choose the direction to implement the project; "defend" own choice regarding the direction and subject of the project.

The key is the third stage - management, where is the implementation of a qualitatively new form—EPI. The student works at the position as an intern and within 13 weeks directly performs the task defined in the previous stages. The project carries out practical work - development and necessary decision making. An intern gains the skills of assignments creation, generalization of propositions made by co-executors, prepares the agenda for the assembly, monitors the realization of decisions made. An intern is directly responsible for all the above mentioned tasks under the control of the supervisors.

The final stage is the practice completion and writing a bachelor's project.

Results

Each of the stages in the proposed EPI model enables students to form all necessary integral and occupational skills which are provided in the standard of higher education for the specialty 073 "Management".

To achieve the successful results of training and provide with new knowledge and practical skills, students are allocated to the profound organizations and executive authorities.

The first year of experimental work reveals that in further program and methodical EPI materials should be individualized and focused on the branch of business which is training base organization is specialized in (production of goods and services, culture, education, local authorities etc.). Furthermore, a specific attention should be given to the following: a degree of specific subdivisions attachment to implementing the tasks set, the level of specific subdivisions self-sufficiency in decision-making process, ratio of the decisions previously made to prompt decisions, responsibility and consequences of the decisions made etc.

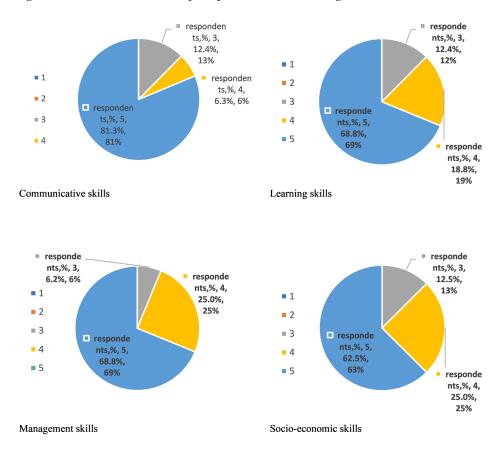
The obtained results confirmed the right choice of the chosen EPI direction. The majority of experiment participants showed such skills as communicative (mastering the culture of speech, advanced IT technologies, interpersonal communication etc.), learning (ability to gain new knowledge and apply it in practice), socio-economic (knowledge of economic behavior, which enables to participate effectively and meaningfully in production processes) and management (readiness for decision-making, ability to assess the situation properly, identify and consider most of subjective factors, cope with new and unexpected situations).

Moreover, the interns demonstrated sufficient level of the following skills: psychological (awareness of main principles and categories, general and social psychology, psychology of personality that provide shaping the ability to improve constantly own performance), analytical and diagnostical (skills to collect, develop, analyze and generalize the information and present results), subject-matter (awareness of theoretical foundations of the work performed, ability to apply acquired knowledge in production and social activity, perform main professional and methodical functions) and technological (functional knowledge and technological activity skills aimed at developing professional competences, quick adaptation to new labour conditions skills, information about production objects and technological processes).

Research skills (mastering scientific thinking, ability to observe and analyze, make assumptions, process the results of scientific observations within the frame of the work performed) were evaluated at high level by 43,8% of respondents, although such skills are not required to a great extent at those workplaces where the respondents worked (which is also confirmed by the results of second block of a questionnaire).

At the same time mismatching between workplaces requirements and legal and regulatory skills (awareness of legal and regulatory basis in the professional activity sphere) was revealed, which confirms the lack of theoretical training in educational program for managers.

Figure 1. The interns results of subjective own matching skills evaluation



DISCUSSION

Educational and professional internships is a new model of practice-based education centered on the factors that shape the peculiar features of this model and differentiate it from traditional educational models.

In the authors' viewpoint, the following factors can be identified:

- a) "actual workplace", i.e. student's independent performance of an employee's job duties during extended period (minimum three months at one workplace);
- after adaptation period the specific areas of activity the intern will be responsible for should be determined. All production targets should be clearly defined as well as job duties, plan of work duly approved, responsibilities concerning the task set;

c) the intern obtains individual assignment which includes the introduction of innovative steps, project development beneficial for the enterprise, and real programs of best practices implementation.

The intern should take all steps – from choosing the assignment subject to making decisions at the enterprise. These steps also include development of technical task and mandate, the list of co-performers selection and harmonization, an interim and a final versions preparation of the decision project, analytical report concerning efficiency of the actions and the package of supporting documents. On completion the practice term the intern should report own proposals at the meeting with employers and argue the necessity of specific decision. Finally, the intern should provide the plan of this decision implementation and its execution monitoring;

- d) organizational tasks defined in guidance and training documents, in particular:
 - terms of EPI training at the final year of bachelor's course;
 - clear regulation of interim reports: periodicity, the form of report, members of the commissions with obligatory participation of EPI base and university representatives, requirements and reporting procedure etc.;
 - authority of the Department of the university and the intern's university supervisor concerning their effect on setting and changes of assignments defined with specific nature of EPI base enterprise.

The key point of EPI is shaping the intern's post specialization, its direction and profile of activity, duties and responsibilities, individual assignment, the level of authority for decision-making.

The main challenging points in EPI system of future managers concern activity directions they cover. Several alternative scenarios are worth considering. Each of them has its own advantages and disadvantages (Table 3).

CONCLUSION

Universities face up the complicated choice: which of the scenarios is better to select to provide the efficiency of future specialist's preparation. To the authors' mind, the optimal variant is to develop a model which combines all three scenarios in different ratios.

EPI program is divided into stages, each of them include the following three components:

Table 3. Advantages and drawbacks of different EPI scenarios implementation for professional managers' preparation

Scenario	Advantage	Drawback
A) the intern goes through all the main directions and the units that take care of these directions	- participation in the processes of all main business activity operation; - possibility to shape the balanced conclusion concerning all spheres of activity; - managerial experience which requires monitoring all activity trends; - opportunity to choose the activity for further practical or scientific activity which match the appeals or skills of an intern.	- inability to focus on specific directions because of the time limit; - presence of several supervisors with various dimensions; - necessity to communicate with a wide circle of specialists that prevents from researching the experience deeply; - limited opportunities resulted from timing which enable to undergo the full-value way from situation analysis to participation in decision-making process.
B) an intern is focused on the one chosen direction, undergoes all stages available, mastering particular specialization	- deep studying of the specific direction, gaining systematical experience and skills; - relevant experience of teamwork; - opportunity to introduce own real ideas; - more systematical way of studying the environment for chosen direction: market infrastructure, competitors, stakeholders, consumers	- lack of practical skills and relevant work experience as for the directions chosen; - inability to make complex estimate of business activity, efficiency of its work, appropriate management level; - insufficient level of contact with executives and managers, in particular, those who supervise other directions; - the risk of narrow specialization, EPI may not correspond with the future occupational directions in practice
C) an intern is concentrated on preparation of specific project which provides implementing the set of measures, new development models, changes in organization strategy, particularly, its place in competitive environment	- gaining experience in implementing new technologies, development, decisions; - experience of innovative solutions, best practice realization; - skills of the team shaping and the team work, coordination of the teamwork; - managerial and leadership skills obtaining; - experience in planning, justification of managerial decisions, project monitoring	- narrowing of activity on other projects limits the gaining wider experience of economic processes in practice; - lack of opportunities to gain experience of routine everyday practical work in other subdivisions; - interaction with rather narrow circle of specialists which are employed in project team work; - comparatively short time of practice in organization which is less than the term of the project duration

- EPI in several profile subdivisions which provide gaining practical qualification according to the direction;
- choosing the base subdivision where the intern will work;
- choosing the project to participate in which is implemented on the EPI base.

As for the time ratios, we apply the following approaches. The general term of EPI is seven and a half months from September,10, to May,1. Up to May,1 organizational and instructional work is held at the university. From May,1 to June, 10 time is set aside to prepare the Bachelor's thesis. Two months is necessary time for each of the components. In general obligatory program by three components comprises six months. One and a half month is the time provided for individual additional component to the intern who independently may lengthen the time for the component (EPI scenario) desired.

It is necessary to make decision as for the choice of the one of three variants as the leading and to obtain additional individual time period for its executing up to one and a half month before EPI starts. Preparation period should be arranged: to define the workstation, supervisors, develop plan and find out the convincing arguments for the chosen EPI model. As a rule, it is hard to make such choice by all sides – intern, university and organization supervisors.

The authors have developed an approach based on the questionnaire for the most reasonable solving the problem. Before the internship start, the intern and the enterprise (organization) representative who is responsible for this internship, pass a parallel questionnaire.

Author Contributions

In 2020 the Department of Management at BorysGrinchenko Kyiv University started experimental realization of the model of educational and professional internships for four-year students of specialty 073 "Management" (Bachelor's stage of higher education as for educational and occupational program "Management of organization"). The authors of the article belong to the support group of specialty 073 "Management". The head of the department of management is Dr. Prof. Lyudmila Ilyich. The guarantor of the professional educational program "Management of Organizations", whose students were involved in the experiment, is Ph.D., Assoc. Prof. Olena Akilina. The developers of the EPI program and its organizers are Ph.D., Assoc. Prof. Ihor Yakovenko and Ph.D., Assoc. Prof. Olena Akilina. The authors of the article, in particular Ph.D., Assoc. Prof. AllaPanchenko, supervised the students during the experiment.

Ethical Issues

We should emphasize that during the research the most important principles of ethical behavior, which are admitted by scientific community, have been followed: – voluntary participation and safety of the research: students take a voluntary part in the research, the participants can leave the research at any stage without any consequences; – anonymity: the survey of participants is carried out anonymously, so the researcher and anyone who can read the survey results can't identify the answers of a certain participant.

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