

MANAGING CHANGE IN ECONOMIC EDUCATION THROUGH A LEARNING BY DOING PROGRAM (PRACTEAM)

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Abstract *Entrepreneurial universities have emerged as a consequence of survival in a global competitive environment. It is for that reason change in economic education becomes so important. The aim of this paper is to discuss how well learning-by-doing programs could be used and produce significant and sustainable results in Romanian universities used the results of the implementation of a learning-by-doing program (PRACTeam). The project "The practice of economics students. An inter-regional partnership on the labor market between universities and the business field" (PRACTeam) developed starting from the 1st of October 2010 for a period of three years by three partners working together: the University of Oradea - Faculty of Economics, the West University of Timișoara - Faculty of Economics and Business Administration, the University "Ștefan cel Mare" of Suceava - Faculty of Economics and Public Administration. For students in the second year undergraduate programs, 180 students/year from each of the three Universities partners, time for practical internship is 90 hours, 6 hours / day, during three weeks. Place of internship for students in undergraduate studies is provided by various units (private companies, public institutions, NGOs) under certain partnership agreements, as well as Framework Convention, which specifies the rights and obligations of the parties involved. The internship- units appoint a tutor, who will guide the undergraduate students during the internship, this is done in collaboration with an representative of the university. Methodology-wise the paper relies upon a qualitative research approach that includes interviews with twelve undergraduate students, systematic Observation (using the PRACTeam Selection Sheet and PRACTeam Sheet of practical skills) as well as secondary data regarding knowing and showing what you know. It is anticipated that a quantitative approach could be used for a follow-up work which can test capacity for generalisation of this paper's findings. Thus it would be interesting to know whether this increase educational effectiveness through "learning by doing" - basically it is maintained over time (e.g. in the master studies). What would we expect after completing this program is to determine a change, the undergraduates to be transform. How can we improve learning? One way to enhance "learning" is through "by doing". If you want the graduates to learn about business, they must be put in situation to see it with their own eyes how it works, or even how it to do. It is a shift from a learning model based primarily on the reproduction of information from one based on producing results using information. In the economic education by including "Learning by Doing" - program PRACTeam, undergraduates are encouraged to prefer the questions, rather than the imperatives: "how to be done?", instead of "you must do it!".*

Key words: *management, change, economic education, learning-by-doing program*

JEL classification: *M10*

1. Introduction and purpose

Under the pressure of economy in a world that exceeded seven billion people, the issue in discussion is to have usable knowledge. To be applicable, the knowledge must exceed the theoretical scope, and to include skills based on experience. This leads to what is known as: knowledge and skills.

The idea is not new. In 1916, almost 100 years ago, John Dewey remarked in his book, *Democracy and Education* that: "education is not an affair of "telling" and being told, but an active constructive process ... Its enactment in practice requires that the school environment be equipped with agencies for doing ... to an extent rarely attained." (Dewey, 1997: 38, first published in 1916).

In 2007, the Romanian Presidential Commission for Analysis and Policy in Education and Research found that individual performance of some undergraduates and teachers, not belonging to the school as a whole, that 95% of the courses are held in university and the graduates that start to work in knowledge-based economy have less knowledge about the actual state of their field. The problem is even more acute in the economic field, it is most distinctly explained by the present crisis, one of historic proportions that manifests itself now time, time of advanced globalization, which determines the extension of registered damage, like a comet tail. Reality is marked by fresh destructive effects, as many banks bankruptcy, disappearances and insolvencies of companies, savings evaporation, loss of goods and especially jobs, represents convincing arguments for the necessity of a profound changes, to avoid a possible "capitalism of disasters" (Klein, 2008). Everyone hopes and expects solutions, in our case, anchored in economic science. Those who would performed mission, must be the one who it knows and the one that it works. A science, "based on the assumption of general richness (either prosperity or as welfare) is rather sentenced to be a religion, a religion of social progress. It is a religion that it may not anticipate the fall into sin (crisis) does not prevent its consequences through solutions done before" (Dinu, 2009). And has not succeeded to be a religion, "not because it would not have discovered the necessary knowledge, but because those knowledge were acquired and are used for destructive purposes" (Smith, 2006). Or maybe, now in the XXI century, its deadline it arrived for the given credit of the previous century without enough coverage, that despite the fact that it was not religious, and this was more evident starting since its second part.

In terms of crisis, experts (as well as the public) were divided into two camps. The first consists of those who believe that this is an error, unavoidable for a system that is based on risks, and the second consists of those who see a serious defect, with malignant potential, to be removed. While Frank Knight, one of the founders of economic theories of the Chicago School, believed that teachers should instill in their students the belief that every economic theory is a sacred feature of the system, we believe that economic theory is only a hypothesis subject to debate. As is well known, economic theory is based on two principles, namely: the first tells us that economic laws have proven long-term durability and the second has to do with the large number of rational economic agents. Or, violations were serious, both in duration and intensity.

It seems to become increasingly clear that, if before mankind was concerned predominantly on scientific, technological development and so on, it is time that emphasis should be placed on developing better people, in bringing to the fore the fundamental values such as ethics, morality, truth, honesty, integrity, conscience etc.

The aim of this paper is to explore relationship between a program of learning-by-doing, motivation, knowledge and skills in the Faculty of Economics of University of Oradea.

2. Theoretical framework

The *learning-by-doing* concept was identified by Kenneth Arrow in his attempt to explain the endogenous growth theory. Later Robert Lucas Jr. (1988) and Yang and Borland (1991) showed that *learning-by-doing* provides long-term solutions for growth. Currently, the concept known as *learning-by-doing* has become popular through its inclusion in what is called evolutionary economics and Resource-Based View (RBV) of the firm.

In the economic literature the social-cognitive theoretical framework developed by Bandura enjoys recognition. This was the first known author who underlined an important thing namely that of knowing and showing what you know. Bandura states that self-efficacy, meaning "belief in one's capabilities to organize and execute the courses of action required to produce given attainments" is the most powerful motivational element (Bandura, 1997: 3). Several studies (e.g. Schank, 1995) confirm this. Thus, Schank shows that people learn because something has caused the need to know. Undergraduates learn because they have no alternative. It is clear that this is not representing a natural motivation, and therefore is not able to create knowledge in the most appropriate sense of the concept, namely a depth knowledge, long-standing and solid. One is to be heard about something, and another is to know something about it, but quite another is to really know/ its had studied that thing. And besides the economics graduate is asked for skills. Or, it's well known, the fact that the best way to teach someone is to put her into a situation that requires precisely those skills you want to learn her. In this manner it is born a natural motivation, an organic motivation to learning. One that it comes from within, capable to produce the changing for the better.

Bandura (1997) highlights four sources of self-efficacy:

- An active experience, craftsmanship. A successful attempt increases self-efficacy performance not only because of the performance itself but also of personal factors (e.g. "I can") and situational (e.g. "I know whom to ask");
- Vicarious experience to modelling. No one remains immune to influences, and in time the circle of those who influence us is more and more growing. More, there is a trend, to be more and more involved in the work which we watched! A model within reach is "from our world", and this is a valuable resource and desirable;
- Verbal persuasion. A real-time feedback, provided by someone with authority, it would be an ideal, it is somebody we admire, it is another key ingredient;
- Physiological and affective states. Brancusi rightly said that "is not hard to do something; the hardest thing to do is to put yourself in a state of doing".

Spiru Haret, the great mathematician, who has linked his name to the introduction of modern education in Romania, in its time (1910) determined the most profound and effective school reform, which was based on similar ideas. He founded a school characterized by responsibility, diligence, discipline, rigorous knowledge, "a well built machinery" as he called it in his paper: "Social Mechanics". Adept of hours in nature, he wanted to create that organic motivation, fully manifested: on an intellectual, emotional and spiritual level. It is confirmed that always we are motivated by an

aspiration towards a future, in our case the economic profession, that it is a compound that brings together: to be, to have and to be useful. In a certain way, we remove ourselves from the intellectual experiences of the external world in which everything is the result of what it was before. If we have aspiration to build a future world and this is what determines evolution, it means that we must add passion. It is about the "comprehensive man"! "The comprehensive man" has insights, and impulses which then she must give a form. But when she gives a form to her intuitions, her impulses she appeals to her own intelligence. It is essential that its intelligence must structure the impulses, the emotional-spiritual and the intellect all must work together, circumscribed to the idea of building a bridge. The intellect and the emotional-spiritual is one of those couples of different concepts, but which cannot exist unless together.

To become useful for lifetime, the education must award to a graduate, the skills of using information for her future profession, information that will be classified according to the nature of own objectives, of subjects and the problems that need solutions.

In this paper, the concept of *learning-by-doing* refers to the ability of economics undergraduates to increase their level of training through practical internships, performed on specific positions in the company under the guidance of a tutor specially trained and motivated.

3. The Use of the Theory in Three Economic Faculties

The release of the two components: intellectual and act, for aiming of the real development in preparing of undergraduates has found its expression in the project "The practice of economics students. An inter-regional partnership on the labor market between universities and the business field" (PRACTeam) financed from the European Social Fund - "Invest in people!" POSDRU 2007-2013, Priority Axis 2 "Linking lifelong learning with the labor market", Key area of intervention 2.1 "Transition from school to work", financing Agreement no. POSDRU/90/2.1/S/64150. Amounting to 19,830,198 lei, the PRACTeam project developed starting from the 1st of October 2010 for a period of three years by three partners working together: the University of Oradea - Faculty of Economics, the West University of Timișoara - Faculty of Economics and Business Administration, the University "Stefan cel Mare" of Suceava - Faculty of Economics and Public Administration.

The overall objective of the project aims to develop work skills for undergraduates in economics, during a practical internship on labor market conducted by inter-regional partnerships between universities and business. A survey conducted under a Phare 2005 project on a sample of 721 companies from Bihor revealed as scarce the following categories skills of employees - graduates of higher education institutions: entrepreneurial skills - 16.2%, relational, communication skills - 35.8%, technical, professional skills - 43.4%.

In summary, there is weak adaptation of education and training prior to employment and work. Moreover, future graduates have a reduced capacity entering the labor market due to lack of experience. Practical training assessments conducted before project implementation showed that the firms do not fully understand the contents of the corresponding practical training programs, complaining that they are not adapted to the firm. Through the PRACTeam project, assimilated to the program "Learning by Doing", we sought to provide opportunities for effective knowledge of the employers

environment, to offer a real motivation to create the foundations needed by graduates to achieve professional and transversal competences. In order to individualize the internship for each student, personalized files were prepared for each post and each student, according to the distribution of undergraduates in host organizations and on the topic of practice specified in the PRACTeam Guide.

For students in the second year undergraduate programs, 180 students/year from each of the three Universities partners, time for practical internship is 90 hours, 6 hours / day, during three weeks. Place of internship for students in undergraduate studies is provided by various units (private companies, public institutions, NGOs) under certain partnership agreements, as well as Framework Convention, which specifies the rights and obligations of the parties involved. The internship- units appoint a tutor, who will guide the undergraduate students during the internship, this is do in collaboration with an representant of the university. Tutors themselves receive in advance a training course within the program PRACTeam. After completing the practical internships, tutors send their feedback, beside recommendations and proposals on how to conduct the practical internship, upon curricula of undergraduate programs involved in the project PRACTeam, for a better adaptability of graduates to Labor market.

Tutors participate in establishing generic tasks of the job (occupation) that it can access for practical internship by undergraduate students; meanwhile the Undergraduate students are questioned about the need for training. At the end of the practical internship, each undergraduate make a report containing: (1) Overview of practical internship (1.1. Aims of the internship; 1.2 Presentation of the host organization - the legal issues, business and organizational structure peculiarities; 1.3 Submission Service / Department / Office where it was conducted the practical training), (2) Internship description (2.1 Describe the 15 topics in accordance with a custom theme and/or activity; 2.2 Presentations the activities carried out, according to the topics of practice and Diary of the Intrenship, (3) Conclusions and recommendations (3.1 Comments upon the practical internship, through the eyes of the colleagues of intrenship (network) , and of the members of the host organization, as well as on the activities during the practical internship; 3.2 Creating a SWOT analysis of the internship unit; 3.3 Proposals to improve the practical operation of the unit, in terms of the position held; 3.4 Practical internship - highlights and contributions in terms of professional development / individual), (4) Discipline sheet for "Practical Internship" with custom tasks to various jobs.

Evaluation of students is based on three components: 1. Presentation by student practical work performed (weight 50% of the final grade) 2. evaluation of the tutor, who appreciate how the student was able to integrate into the company and its ability to implement knowledge Theoretical acquired specialized courses and practical knowledge acquired (weighting 25% of the final mark) 3. Evaluation Teacher - responsible for practice, who appreciate how the student has complied with the terms portfolio of practice and how it responded guardian requests of practice (weighted 25% of the final grade).

4. Research questions and method

In the study we had conducted, we have started from the following hypothesis:

H: We assume that practical training through PRACTeam Program “Learning by Doing” contribute to better adaptation to the labour market of graduates of Faculty of Economic Science by acquiring skills and it prevent/improve the adaptation difficulties.

The problem of adaptation to labour market is an essential part of education in economic field. In our opinion, achieving this, indeed, requires a diversification of situations, also of learning experiences and their construction according to the possibilities and needs of different categories of students (e.g. by personal variables, work experience, other social- demographic variables).

For testing the research hypothesis we watched and analyzed two aspects that constitute the research objectives, namely:

- adjusting to a job requirements, seen as an indicator of the acquisition of professional skills;
- normative and social adaptation, seen as an indicator of the acquisition of transversal competences.

In order to test the hypothesis and objectives of our work we used the following methods:

- semi-structured interview method;
- systematic Observation (using the PRACTeam Selection Sheet and PRACTeam Sheet of practical skills);
- Method of survey the documents.

Semi-structured, personal interviews were conducted in November 2012. Twelve undergraduates from the University of Oradea – Faculty of Economics have been invited and agreed to participate. The students interviewed are listed in Table 1.

In-dept interviews were used as research method and we mention that the interviews were of conversational nature. No fixed questionnaire was used (Paton, 1990). Instead the respondents – undergraduate who followed the PRACTeam project, were encouraged to speak about their experience, their results, their vision for the future. Follow-up questions were asked by the author of this article as inter-regional coordinator for bachelor studies in the PRACTeam project. Each intervention was made not to influence the respondents in any direction. Each interview lasted for about one hour and focused on learning, prerequisites, attitudes, achievements.

The interview guide was divided into three sections: (1) one who seeks data about the place of practical internship and data of the student; (2) another section aims the practice activity covering topics from the perspective of the jobs held position; and (3) another is upon the experiences related to practical internship. In parallel, we conducted documentation, an analysis of selection and records of testing skills. Then, we took each interview, and we tried to find out what it is says about each participant regarding her adaptation to job requirements, as well her adaptation to normative and social requirements.

Table 1: The respondents – students who follow PRACTeam project that participated in this study

Specialization (University program: undergraduate program)	No of interviewed students	Occupied jobs during the internship	Period
International Business	3	economist reviewer purchase (1) assistant manager (1), sales representative (1)	5-25 Nov. 2012
Accounting and Book Keeping Informatic Systems	3	accountant (2), public administration expert reviewer (1)	5-25 Nov. 2012
The Economy of Trade, Tourism and Services	3	receptionist(1), salesman (1) company administrator (1)	5-25 Nov. 2012
Finance and Banking	3	economist reviewer in the financial - accounting domain (2), client counselor (1)	5-25 Nov. 2012
Marketing	3	marketing expert reviewer (1), salesman (1), commercial representative (1)	5-25 Nov. 2012
Management	3	economist reviewer in Management (1) assistant manager (1), Management economist (1)	5-25 Nov. 2012

Source: author's own analysis

5. Findings and discussions

After the data were analysed, the following aspects can be mentioned.

Firstly we can mention aspects *confined to the sphere of knowledge*, respectively, the acquisition of skills. Undergraduates interviewed talked about "enriching and enhancing theoretical knowledge learned" and "access to new knowledge." The way how knowledge is created, but mostly how it is managed, how it is disseminate and integrated into business in the new millennium, undeniable competitive advantages. How it is knowledge and why is it so special asset? Knowledge it is transferable among entities / individuals, like any other type of asset. It becomes flow, but it remains even stock, each participant and each beneficiary, being both supplier and beneficiary; actually adds to what she has, what receives from others, depending on how it is able to receive them. Knowledge is contextualized, meaning that after it is produced and it is disseminated, is received a feedback, this serves to increase the level of knowledge. It evolves into the understanding of the context, and thus knowledge are particularized. Knowledge assumes mobilizing a variety of theoretical perspectives and practical methodologies. Knowledge it is reflexive, meaning a communication network capable of integrating multiples viewpoints. Knowledge

produces, on the long-term, a creative behavior, with relational potential more flexible in society. An important component of knowledge is innovation. It is based on the abilities of individuals, which are characteristic of them and remain the same in any social environment: skills acquired by individuals - knowledge, information, and experience - that can be put to use to create wealth. At the basis of this statement are two important aspects: (1) the existence of a potential based from knowledge, information and experience that can contribute to products and services; (2) the ability to transform this potential into a series of operational elements, creators of value, to be integrated into end products.

Efficient capitalization of knowledge and skills moves from "the logic based on conformity" to "the one based on pro-activity".

Actual, circumscribed to adaptation of the job requirements, its may defined two indicators:

- the working style, made known by references to situations of practice in the place where the internship takes place, using examples or attributes such as "systematic", "rhythmic", "organized", "targeted";
- the way of acquiring knowledge. Meaning that students learn more logical, more natural, with the instant possibility of testing. E.G. "You cannot function as an external hard drive, you must yourself be involved, to come with your own solution", "Do not start from opinions of others, but start from your own assessment."

Secondly we can mention aspects circumscribed to attitude, behavior, character.

This type of program, meaning "Learning by Doing", is an opportunity to experience the working environment and system of social relations and associated work. Placements lead to the formation of certain habits and attitudes of prospective employee, including those to work in a team. Undergraduate discover and develop their passion for the chosen specialization, ability to learn, to learn new behaviors, develops skills to utilize their working environment in new ways. In this field, the profession can be explained much more easily:

- the profession answers to the question what do you want to do? complementary with what do you know? This is a strong argument for why the learning system needs a professional dimension;
- the profession anticipates goals and the occasions that occur later in life. Another teacher occurs – the tutor, a possible model, much more credible for the next generation - multitasking, accustomed to short-term and firing stages.

We can remark as a result restoring the role of experience, of fact and free connection to another form of education, non-formal and informal. Early learning mechanisms as attractive and ludic process help preparing for an active life, with the possibility of changing assumed roles in each period.

The desired outcome of learning circumscribed to this issue is in our opinion, the formation of the habit to distinguish between identity and role, by adopting a critical reconsideration directed to the former benefits.

Conjugate to the normative adaptation and social adaptation, we identified two indicators:

- Capability to comply with the rules and standards of conduct operating within the internship unit. It is about a capability, is builded on the naturalness, from

understanding things from inside: "rules are meant to protect us"; "I can see, rules make sense";

- Interest and concern for the practical internship: "I made this myself", "a job it is what you make of it", "you can make money if you know how."

In third, are those aspects circumscribed to understanding the context, to be connected to the reality.

The growth in the rate of transformation of society requires continuous renewal of knowledge. Especially, those useful, applicable. We are witnessing a shift of emphasis from knowledge to problems to be solved. However now, all problems are interdisciplinary, it requires adequate preparation. Through internships, undergraduates come to understand that everything is connected to everything: food, water, population, health, education, habitat etc. Here is the testimony of a student interviewed: "Good idea, this practical internship. We are not only data collectors, introducing notices and bills. Thus, we have the opportunity to see the company, to learn about the products we sell, plus you have to think of supply, transportation, distances, weather etc. There are many, many other things that need to be understood". Basically it creates availability and attractiveness to leave the usual environment to learn and exploit new knowledge, to verify them. Here are two results that are results are immediate consequences:

- Developing skills for integrating (instead of adding) new knowledge into what the individual already knows;
- Developing teamwork skills, a group of people who share a common interest, they meet, discuss and moving towards affection, power, and tasks.

Understanding the world in which we live in makes possible the transition from the adaptation anticipation. And "disasters size decreases as people think and imagine possible solutions to prevent or at least limit their negative effects" (Kyle Watt - Titanic effect in the economy).

Possible circumscribed indicators, both to adaptation to the job requirements, regarded as an indicator of the acquisition of professional skills, as well as normative adaptation, and social adaptation, seen as an indicator of the acquisition of transversal competences such as:

- Capacity to understand the context of work by practicing a role, and responsibilities. "Immediately we saw the consequences"; "I have had realized that I have gaps when I was told that I would be needed to know, and I learned that the practical internship is not instead of school, but in parallel with the school";
- The capacity to assimilate desirable values. I appreciated that the tutor could alternate "the liberty with the rule", "encouraging with criticism."

6. Conclusions and limitations

The Learning has all the essential features of the "work": effort, energy, tenacity, consistency, discipline in pursuit of a goal or result. Into economy is more desirable to be consider, than in any other areas, as earlier as possible, building teams and allocating an trainer or tutor.

How can we improve learning? One way to enhance "learning" is through "by doing". If you want the graduates to learn about business, they must be put in situation to see it with their own eyes how it works, or even how it to do.

It is a shift from a learning model based primarily on the reproduction of information from one based on producing results using information. In the economic education by including "Learning by Doing" - program PRACTeam, undergraduates are encouraged to prefer the questions, rather than the imperatives:"how to be done?", instead of "you must do it!".

What would we expect after completing this program, as ideal of education, is the undergraduates to be transform. In fact in front of us we do not have, some simple work objects, neither some individual persons who must to follow a routine, repeating the the same actions.

"The practice of economics students. An inter-regional partnership on the labor market between universities and the business field" /PRACTeam project is an attempt to approach to implement principle: "Above those who do not know are those who read, above those who read are those who understand, above those who understand are those who learn with and from others".

Based on the findings it can be said that the conduct of practical internship through the PRACTeam and also by tehnique "Learning by Doing" - contribute to a better adaptation to the labor market of the future graduates in economics field, by acquiring skills and prevent / improve adaptation difficulties. Such, our research hypothesis is confirmed.

This study certainly has limitations. Its limitations are related to the choice/ to the selection of undergraduates interviewed and related to the research method chosen. Given to these limitations, we propose to in the next step to outline some research directions to improve results. Thus it would be interesting to know whether this increase educational effectiveness through "learning by doing" - basically it is maintained over time (e.g. in the master studies). We also believe that it requires an extensive study where to find answers to questions such as: undergraduates with good school results are better suited to the job requirements? To what extent student development with a personalized training program is able to increase its capacity to adapt to market demands?

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