DEVELOPING GENERIC SKILLS IN BUSINESS EDUCATION

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ABSTRACT:The purpose of this paper is to present our research concerning the readiness of students in developing generic skills in business education. Generic skills, also known as core skills, core competences, or key competences may be the answer to the university education in business for future professionals, when the business environment becomes turbulent. In such a changeable environment generic skills prove to be more useful than explicit knowledge since the knowledge lifetime is shortening. When many old jobs disappear and new jobs are created almost every day generic skills have the feature of being transferable such that employees can switch more easily from one job to another one. Our research is focused on conceptual skills in the business domain: 1) searching, collecting and organizing data, information, and knowledge; 2) problem solving; 3) creative thinking; 4) learning to learn; and 5) learning to learn. We developed a questionnaire containing items related to these conceptual skills and applied it to 500 students from two Romanian universities to evaluate their readiness for developing such generic skills.

KEYWORDS: business education, conceptual skills, generic skills, knowledge transfer, learning

1. INTRODUCTION

Generic skills are also called key or basic skills, key or core competences. Generic skills constitute mental constructs that integrate rational, emotional, and spiritual knowledge, and the capacity of applying it in different contexts [1], [2], [3]. While knowledge can be considered as a knowing potential, a generic skill reflects the individual capacity of transforming the knowledge potential in operational knowledge and to apply it in a given social and economic context. That means that a skill means much more than a knowledge potential which can be obtained through university learning. That explains why today, in a globalization process which generates turbulence in the business environment, developing generic skills for our students could be more useful for their employability than just transferring explicit knowledge to them. According to "Recommendation of the European Parliament and of the Council", "Education in its dual role, both social and economic, has a key role to play in ensuring that Europe's citizens acquire the key competences needed to enable flexibility to such changes" [4]. That means that traditional education based mostly on knowledge transfer from professors to students should be changed to an education focused on developing key competences or generic skills able to equip students for their professional life, and to form a basis for further learning and working life [5], [6], [7].

Theoretically, our universities have already introduced this new paradigm of teaching students and developing generic skills since the formal document describing a university course contains a chapter about basic competences and interdisciplinary competences, but in the real life very few professors made the effort to switch from the traditional teaching and learning paradigm to the new one. The explanation comes from the fact that developing such competences imposes a change in the students' load and learning style which is not so easy to do. That means a greater effort from students' part in searching for information and knowledge, reflecting upon the new ideas and re-structuring their whole knowledge basis. The purpose of our research is to evaluate the perception of students on the new paradigm of developing generic skills. We focus upon the conceptual skills, which are essential in business education: searching, collecting and organizing data, information, and knowledge; problem solving; creative thinking; learning to learn; and strategic thinking. These skills are not completely independent entities since they overlap somehow and act interconnected in the real life. We designed a questionnaire containing items which reflect each of these skills and stimulate students to assess their readiness concerning developing them. Then, we process all the valid questionnaires and interpret them trying to understand the awareness and willingness of students to switch on a new paradigm of teaching and learning focusing on developing generic skills for business education.

2. WHAT ARE GENERIC SKILLS

Generic skills have the advantage of being transferable to new contexts and thus offering students better employability chances. According to Curtis [8], "A skill is regarded as generic if observers see a skill manifested by different people in many different contexts. It is transferable if an individual who demonstrates the skill in one context is able to apply it in others". In the European Recommendation mentioned above, there is a framework composed of eight key competences or generic skills: communication in the mother tongue; communication in foreign languages; mathematical competence and basic competences in science and technology; digital competence; learning to learn; social and civic competences; sense of initiative and entrepreneurship; and cultural awareness and expression [4]. These generic skills are all considered equally important, since each of them have a well-definite role in a successful professional life.

Industrial experience demonstrated that generic skills are important since they contribute to the increase in efficiency and productivity of work, and they are valuable intangible resources in achieving a competitive advantage. For graduating students, generic skills increase their chances for employability, the process by which they can get a job in concordance with their education, attitude and motivation [9], [10]. Generic skills increase chance for employability, a characteristic of the new complex turbulent business environment. According to Curtin, employability skills can be understood as being "skills required not only to gain employment but also to progress within an enterprise to achieve one's potential and contribute successfully to enterprise strategic directions" [11]. These employability skills have been documented very well in The Secretary's Commission on Achieving Necessary Skills (SCANS) Report, published in the United States,[8]. The Report considers three fundamental categories of generic skills:

- Basic skills literacy, numeracy, and communication.
- Thinking skills decision making, and problem solving.
- Personal qualities responsibility responsibility, self-esteem, and integrity.

The research performed by the SCANS Project has been upgraded by the 21st Century Workforce Commission established by Al Gore. Similar research has been performed in Canada by the Conference Board of Canada in several projects: Employability Skills Profile (ESP), Essential Skills Research Project (ESRP), and the Employability Skills 2000+ Project [12]. In this last Project, the authors consider the following five fundamental skills: skills needed as a base for further development; skills for communication; skills for managing information; skills for using numbers; and skills for thinking and solving problems. This last category of generic skills constitutes the focus of this present research.

3. RESEARCH METHODOLOGY

We focused in our research on the thinking or conceptual skills since they are fundamental in any process of decision making. They are the following:

• *Searching, collecting and organizing data, information, and knowledge.* This skill is important in creating the necessary data basis for decision making. Usually students are given all necessary information and knowledge by their professors and they are not able to search for information and knowledge.

- *Problem solving*. Usually we teach students how to solve problems by using some wellknown formulae or by using some previous successful similar solutions. We consider mostly well-formulated and well-structured problems. However, when actual students will face as managers real problems, they will be in a different context and will contain many new features for which all the old formulae and solutions remain non-applicable.
- *Creative thinking*. This skill allows each student to find new solutions and new ways of thinking for the new problems and new business situations.
- *Learning to learn.* This skill allows any student to have the capacity of learning throughout life. When the business environment changes rapidly and in an unpredictable way, one needs to have the capacity of learning by himself.
- *Strategic thinking*. This is a meta-skill since it integrates all the other skills presented above and directs them towards the future. Thinking for the future is not so easy since human beings do not have the ability to predict it. We have to develop it.

We designed a questionnaire such that each of these five skills are characterized by six items, finally getting 30 assertions. We asked students to evaluate these assertions by using a Likert scale with five options: 1 (to a very small extent), 2 (to a small extent), 3 (to a moderate extent), 4 (to a great extent), and 5 (to a very great extent). In addition, there are some general profile questions to depict the respondent profile. We addressed our questionnaire to students from the Bucharest University of Economic Studies and the National University of Political Studies and Public Administration from Bucharest. We got finally 340 valid questionnaires and we processed them by using specialized statistical software.

4. RESULTS INTERPRETATION

We present in Table 1 the main data concerning all the items used and: Average for Undergraduate students (Av. UG), Average for Graduate students (Av. G), and Average for all students (Av. S).

No.	Questions formulations	Av.	Av.	Av. S
		UG	G	
Q1	I appreciate those professors who give us the most important	3.51	3.53	3.52
	ideas without entering into details.			
Q2	Solving problems can be learned by solving many problems.	4.20	4.09	4.14
Q3	I like to get out of the standard thinking models which are around me.	4.18	4.41	4.29
Q4	Learning is a more complex process than just memorizing some information.	4.59	4.70	4.64
Q5	For business is important to think on a long term.	4.65	4.65	4.65
Q6	I appreciate those professors who request us to read as many	3.06	3.22	3.11
	references as we can in order to understand and apply the			
	delivered ideas during their lectures.			
Q7	Learning the methods to solve problems is more important	4.10	4.35	4.22
	than learning by heart some formulas or standard schemes.			
Q8	New problems request new solutions.	4.11	4.24	4.17
Q9	In school we must learn how to learn.	3.96	4.29	4.12
Q10	For business development it is important to have a vision of it.	4.67	4.84	4.75
Q11	I like to systematize myself all ideas I got from the lectured	4.09	4.37	4.23
_	materials.			
Q12	A problem appears when we identify a difference between the	3.78	3.85	3.81
	current state and one which we would like to have.			
Q13	The past success may become a brake in approaching some	3.04	3.38	3.21
	new situations.			

Table 1.Results for statistical averages

Q14	The learning process must continue after graduating the	4.61	4.82	4.71
	university.			
Q15	Future is not a simple extrapolation of the present.	3.92	4.23	4.07
Q16	I like to make connections between the new ideas found in the	3.44	3.74	3.59
	bibliographical references.			
Q17	A badly formulated problem has no solutions.	3.21	3.16	3.18
Q18	Each of us can develop a creative mind.	4.14	4.35	4.24
Q19	Learning is efficient when it is based on a good motivation.	4.65	4.59	4.62
Q20	The business outcomes are not proportional with the efforts invested in it	2.88	3.26	3.07
021	In business it is important to collect and organize by yourself	3.48	3.49	3.48
X =1	the information you have about the market and competitors.	5.10	5.17	5110
Q22	A well-formulated problem may have several solutions.	3.99	4.11	4.05
Q23	Developing a creative mind is more important than learning a	3.99	4.30	4.14
	large knowledge volume.			
Q24	Learning to learn is more important for your career than	4.12	4.36	4.24
	simply learning professional knowledge.			
Q25	Future exists in our mind as a set of events which are more or	4.01	4.17	4.09
	less probable.			
Q26	In university, the emphasis should be on developing the skills	4.04	4.37	4.20
	for searching, collecting and systematizing information and			
	less on the quantity of transferred knowledge.			
Q27	In business, problems may have an economic rationality	4.09	4.40	4.24
	nature, as well as an emotional one.			
Q28	For developing a creative mind it is important to count on both	4.49	4.68	4.58
	successes and failures.			
Q29	The university is the most adequate place where you learn how	3.15	2.99	3.07
	to learn.			
Q30	Strategy is the way through which one can achieve an	4.50	4.50	4.50
	objective in a long run.			

It is interesting to look for evaluations made by students for each item and to interpret them, even on their statistical averages. However, due to the limitations we have in our paper we shall look only for some extreme values. The lowest evaluation is given to the items 20 and 29. The low value for Q20 shows the strong tendency of students to think in a linear way, considering that there is a relation of proportionality between the efforts made and the outcomes of the business process. In the real life, these variables are related based on nonlinear phenomena. In the same time, the profit of any business is related to the risk involved in the investment. The low value for Q29 shows that students are aware of the fact that universities have been focusing their teaching activities on knowledge transfer and less of developing generic skills, which leaves a lot of room for learning the necessary skills by doing. However, the university has got the best potential to teach students generic skills and students should focus their efforts during the university time to learn them. A very low value has got also the item Q6 which reflect the students' attitude of getting as much as possible from their professors without the personal effort of searching for information and knowledge. It is interesting the fact that in many curriculum descriptions it is mentioned the intention of developing the skill of searching for information and knowledge, but in practice that rarely happens due to the resistant attitude of students. By comparison, in American universities the load of students is much higher than in the European and especially the Romanian universities due to a lot of homework given by professors to students. In this way students must search for information and knowledge developing these necessary skills. Also, a low evaluation is given to Q17 which implies that students don't understand the difference between a well-formulated

and a badly formulated problem. That means that decision making process can be impaired by badly formulated problems and lack of the skill to transform a badly-formulated problem into a well-formulated one. Students agree in great major that for business development it is important to have a vision. However, with rare exceptions the vision reflects the skill of strategic thinking, a skill for which students don't show a significant readiness. A comparison between the answers given by undergraduate students and graduate students shows that graduate students demonstrate a better readiness for developing generic skills since they already have got some working experience and understand the necessity of having good generic skills to increase their chances for employability. For instance, for graduate students, both successes and failures are perceived as the basis for developing creative minds, since both categories yield important tacit and explicit knowledge. That is obvious especially for the skill of *learning to learn*. We performed a factor analysis by using SPSS and obtained as most significant factors the first four generic skills, since the fifth one is actually a meta-skill.

5. CONCLUSIONS

Our research focused on the need of universities to switch from teaching mostly knowledge to developing generic skills, necessary in a changeable and unpredictable world. However, the great effort of such a change is not of the faculty staff but of students who should assume much more homework and responsibility in learning. From the whole spectrum of generic skills necessary in business we have chosen only the thinking skills, namely: a) searching, collecting and organizing data, information, and knowledge; b) problem solving; c) creative thinking; d) learning to learn; and e) strategic thinking. We designed a questionnaire containing 30 items, such that each skill to be described by six characteristics expressed in well-defined assertions. The questionnaire has been distributed to the students enrolled in undergraduate and graduate programs at the Bucharest University of Economic Studies, and National University of Political Studies and Public Administration from Bucharest. Finally we got 340 valid questionnaires which have been analysed by using specialized statistical software. Results show that the degree of readiness of students to have a new curriculum focused on developing generic skills is rather low since they have the perception of a higher learning load. However, the new business environment stimulates universities to consider switching from knowledge transfer to developing generic skills.

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