EXPERIENCE: TO TEACH OR TO REACH?

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ABSTRACT

Impact of teaching method was already confirmed in many studies. Within the changes in teachers' attitude comes the question whether the newly adapted teaching methods and techniques are effective or ineffective. Teachers often tend to use teacher-centered learning aproach and learner-centred approach is being forgotten or not used. This study compares three teaching approaches or strategies: case study based learning, experiential learning and mix of both — case study with experiential exercise. The effectiveness will be shown as managerial competencies development and comparison will be allowed between all measured approaches. The results were statistically tested and compared with others autors' outcomes.

Key Words

Teaching, learning, case study, experiential learning, experiential exercise, managerial competencies

Introduction

Over the past few decades the complexity and the knowledge of strategic management have grown significantly (Joshi, et al., 2003). Because of complexity and knowledge growth, many teachers change their teaching attitude, expectations, and teaching methods. Young (1995) see the shift in the work of teachers as follows:

- from subject knowledge to curriculum knowledge,
- from teacher-centered pedagogic knowledge to learner-centred pedagogic knowledge,
- · from intra-professional knowledge to inter-professional knowledge,
- from classroom knowledge to organisational knowledge,
- from insular to connective knowledge.

"...teachers are now seen as "managers of learning", involved in a range of activities which stretch beyond the day-to-day business of teaching in a classroom or workshop" (Huddleston, Unwin, 1996, p.88).

Impact of selected teaching method was already confirmed in many studies. For example Bell (2005) found teaching entrepreneurship courses more effective when students were allowed to selfselect projects. Wellington, Faria (1991), Corner, Nicholls (1996) found business simulations very effective for enhancing student learning. Higgins, Dermer (2001) found film very useful in demonstrating the concepts which are very difficult to teach other way.

Within the changes in teachers' attitude comes the question whether the newly adapted teaching methods and techniques are effective or ineffective. This study will examine effectiveness of three teaching methods (case based learning, case based learning with experiential exercise, and experiential learning).

In this study the main question is what managerial competencies are affected by used teaching approaches? The effectiveness will be shown as competency development and comparison will be allowed between all measured approaches. The set of observed competencies was identified through analogy with PMI Competency Model (Philip Morris International), data were collected through an online questionnaire and were processed by statistical methods.

Teaching strategies

There are a number of teaching strategies. Huddleston and Unwin (1997) see these strategies as teacher-centred methods at one end to the learner centred methods at the other end. According to Huddleston, Unwin (1997) the teacher-centered methods are: lecture, examination, demonstration, video conferencing, film, instructions, also discussions and tutorials. Learner centred methods are: research-based project, group work, self-directed study, trial and error activity. In the middle of these two criteria we can find structured reading, practicals, role playing. Heath (2006) divides teaching strategies according to level of feedback and level of imposed structure, where discussion of case study shows moderate level in both criteria.

Case based learning

According to Lynn (1999) case studies in education started to emerge in 1870, when Harvard Law School began use this approach in teaching medicine, law, entrepreneurship and management. Mach (2009) adds that at law schools were case studies used for re-plays of already solved trials. Later was this method transfer to the fields of managers, salesmen, politicans and doctors of medicine.

The case studies used in the strategic management have its own specifics. White (2004) describes the problems solved in strategic management as complex, idiosyncratic, linked with each other and often having more than one correct solution. Because of that the used case studies have the

character of research document, which consists of many facts, elements and links between them.

Types of case study summarises Heath (2006) as incident case, background case, exercise case, situation case, complex case and decision case.

The most important didactic aim is to initiate and develop discussion, that enable students to analyse, propose solutions, solve problems or make decisions, in which more proposals how to solve the situation will arise. This aim is supported by Barnes, Christensen, & Hansen (1987), Huddleston, Unwin (1997), Heath (2006). Educational objectives of case study were summarised by Reynolds (1978) and Dooley, and Skinner (1977) as: 1) develop concepts, 2) understand techniques (1) and 2) belong to cases describing just some problem in business), 3) acquire skill in use of techniques (cases bringing short realistic business problem, which is structured), 4) acquire skill in analysis of business problems (cases which are complex and unstructured "slice of life" (Reynolds, 1978)), 5) acquire skill in synthesis of action plans (cases bringing problem with clear emphasis on action), 6) develop useful attitudes (cases focusing on key executives) and 7) develop mature judgement, wisdom (cases bringing complex, realistic, unstructured problem).

Fowler and Scott (1996) found the strategic management teachers rely at most on pedagogy centered techniques - text and cases; they do not use experiential exercises. As Joshi et al (2003, p. 2) stated the reason lies within the "established practice of using cases at the Harvard Business School as early as 1950". Hitt, Ireland, Hoskisson (1997) even added that most cases do not permit interaction among groups, which they consider as the necessary issue in decision making processes in strategic management. According to Fowler and Scott (1996) other negatives within the case study are: limited availability of data and information about cases, outdated cases and limited availability of cases to all aspects of strategic management.

Experiential based learning

Kolb (1984, p. 41) defines learning as "the process whereby knowledge is created through the transformation of experience". Kolb's learning cycle (Kolb, 1984) consists of four stages of learners progress (active experimentation, concrete experience, observation and reflection and generalisation and abstract conceptualisation). Among adult learning theorists is a general consensus that the experiences which adults have gained during their lives are important part of any learning activity they will join (Huddleston, Unwin, 1997). These experiences can help within learning or decrease learning outcomes. "The recognition that adults learn in different ways and that each adult comes to learning with a unique set of experiences has contributed to the development of the theory of experiential learning" (Huddleston, Unwin, 1997k p. 61).

Kolb (1984) states that experiential learning focuses on the process of learning. Johnson and Johnson (1982) argue that experiential learning has the potential to impact student in: changing cognitive structures, change of attitudes, and developing portfolios of skills. Argyris (1990) adds there is also effect on the expansion of the range of a student's life experience, and possibility to create new mental models.

According to Joshi et al (2003) students of strategic management typically do not have real-world experience in the field. Within this situation experiential approaches can help. "Learning and teaching methods need to bring to life organizational contexts the typical student lacks in personal experience" (Joshi et al, 2003).

Joshi et al. (2003) think re-examination of teacher centered learning in strategic management is at least. They propose to use the experiential exercises in the strategic management teaching which would allow "reflective interaction where students could learn from each other's shared, lived experience – even if that experience was in the classroom" (Joshi, et al., 2003, p.2).

The suitable tool for experiential learning are real-live cases. Simkins (2001) sees the real-live cases as the problem or issue which has not been resolved yet and the company is seeking input from the students to assist them in making a management decision. This teaching tool offers possibility to work with already existing experience among students. According to Simkins (2001) real-live cases method requires deeper intellectual thinking but as a result it achieves greater wisdom (more than any other pedagogical technique).

MATERIALS AND METHODS

The aim of the study is to compare effectivenes of three teaching approaches: case study based learning, case study based learning with experiential exercise, and experiential learning method. The effectiveness will be shown as competency development in students' behaviour.

The main research question is: "What managerial competencies are affected by used teaching approaches?".

To identify what managerial competencies are developed during the management courses taught at FEM CULS Prague the set of managerial competencies were set in previous study (Švec, Tichá, Kadeřábková, 2011) (see Table 1). "The competencies affected in management courses taught at FEM CULS Prague were identified and elaborated on basis of PMI Competency Model (Philip Morris International) and 14 specific sets of knowledge, skills and abilities (Stevens, Campion, 1994) with the use of team discussions and creative method of analogy." (Švec et al, 2011).

As a result of identification and elaboration process, and according to Belz & Siegrist (2001), Kubeš, Spillerová, & Kurnický, (2004), Armstrong &

Stephens (2008), Dacey & Lennon (2000), and Hroník (2006) group of 22 competencies has been modeled and divided to six sets of competencies as shown in Table 1.

Competency Sets	Specific Competencies	
Planning and organising	Planning; Organizational skills; Delegation	
Impart information	Transfer of information (information giving); Presentation of opinions; Written communication;	
In-person competencies	Learning by doing; Creativity; Perspective; Self-knowledge;	
Decision making	Problem solving; Quality decision making; Early decision; Cope with uncertainties; Critical thinking	
Professional	Business issues knowledge; Specific field competencies;	
Team building	Co-creation of an effective team; Building relationships with colleagues; Dispute settlement; Focus on results; Issue instructions;	

Tab. 1: Six Competency Sets

As the suitable courses were determined strategic management courses and courses of marketing communication, where the selected methods were used.

For the experiential exercises was used Team Re-shuffle (Švec, Tichá, Kadeřábková, 2011). The team re-shuffle is a "self-directed learning method based on team members' interactions, gaining specific knowledge in the teams, re-formation of teams, transfer of specific knowledge to a newly formed team, and new team's dependency on working with acquired parts of gained specific knowledge. The new formation of teams – team re-shuffle – ensures that each member of a new team has some part of specific knowledge which is crucial for fulfilment of team task. Students are then forced to cooperate within each other if they want to accomplish the task." (Švec et al, 2011, p. 889).

As the experiential learning were used courses where real-live case studies within following stages of learning were present: genuine situation, genuine problem, acquiring the problem, acquiring the information, developing solution, application, e.g. the Google Online Marketing Challenge was exercised with students or course where students were planning real press release and press conference or marketing event.

Courses were attended by students of Business Administration in their final years of study (fourth and fifth year) at FEM CULS Prague. Questionnaires were processed online. Four independent samples were used for the study: two samples with case study learning approach in combination with experiential learning exercise (academic years 2009/2010 and 2010/2011), sample with experiential learning approach, and one sample with case study learning approach only.

In total, 434 questionnaires were collected and administrated. Due to diferent usage of teaching methods samples were collected during two academic years 2009/2010 and 2010/2011 as is shown in Table 2.

Teaching method	Number of interviewed students	Academic year
Case based learning	58	2009/2010
Case based learning with experiential exercise	302 (116 and 186 according to academic year)	2009/2010, 2010/2011
Experiential learning	74	2009/2010

Tab. 2: Characteristics of data files

For processing the data the non-parametrical statistical testing (Wilcoxon test) was used, alpha = 0.05.

RESULTS AND DISCUSSION

The results come from two courses where the case based learning, experiential exercise, and real-live case studies (as tool of experiential learning) were used. The answer to the main research question is summurised in the following Table 3 – NAME, where p values from nonparametric Wilcoxon tests are presented for each teaching method.

Development of	Case based	Case based teaching	Experiential learning
competence within Competence	teaching (p value)	with experiential ex. (p value in 2 ac.yrs)	_
-	0,011719	0,000216/0,000013	(p value) 0,762852
Planning		0,000218/0,000013	
Organizing	0,153577		0,131379
Delegation	0,213224	0,000375/0,000000	0,275521
Transfer of information	0,062980	0,046373/0,021296	0,088034
Presentation of opinions	0,049951	0,000246/0,000004	0,291614
Written communication	0,141483	0,000318/0,000003	0,252536
Learning by doing	0,286321	0,000003/0,000000	0,617841
Creativity	0,147533	0,000339/0,000002	0,001464
Perspective	0,001285	0,000001/0,000000	0,146523
Self-knowledge	0,142369	0,000967/0,000062	0,175948
Problem solving	0,005772	0,000102/0,000000	0,451540
Quality decision making	0,236724	0,001243/0,000002	0,0311713
Early decision	0,126091	0,005582/0,000005	0,120304
Cope with uncertainties	0,028057	0,000048/0,000000	0,184691
Critical thinking	0,001090	0,000000/0,000001	0,125378
Business issues knowledge	0,002865	0,000000/0,000000	0,864784
Specific field competencies	0,000780	0,000000/0,000000	0,090283
Co-creation of an effective team	0,070710	0,001709/0,000032	0,129103
Building relationships	0,139757	0,484213/0,017949	0,030546
Dispute settlement	1,000000	0,000048/0,000000	0,012091
Focus on results	0,001609	0,229429/0,061692	0,351285
Issue instructions	0,077557	0,002104/0,000132	0,404556

Tab. 3: Competencies development in used teaching methods

Competencies within case studies

Courses with pure case based approach developed following monitored competencies: planning, presentation of opinions, perspective, problem solving, cope with uncertainties, critical thinking, business issues knowledge, specific field competencies, and focus on results.

Case based teaching results were relatively expectable. Case based approach lies at most in focusing on and discussions about specific problem so focus on result and presentation of opinions among team members or students at class must be frequent. Also seeing problems as complex issue, finding the ways how to solve partial or main problems within critical thinking are very often during case based teaching. Therefore development of critical thinking and problem solving are consistent with findings of Barnes, Christensen, & Hansen (1987), Huddleston, Unwin (1997), Heath (2006) who say that case study learning enable students to discuss, analyse, propose solutions, solve problems or make decisions, in which more proposals how to solve the situation will arise. Because of selection of solved problems the development in the area of expertise can originate. Development of specific field competencies, business issues knowledge is consistent with Reynolds (1978) and Dooley, and Skinner (1977) who see the case studies as useful tool how to understand the technique or how to technique really acquire.

Competencies within experiential learning approach

Creativity, relationship building, dispute settlement and quality decision making were the competencies developed (as statisticaly significant) within pure experiential learning approach. As casual result we can see unaffected specific field competency in the experiential learning approach. Therefore nonparametric statistical testing (Mann-Whitney test) of this competence between case based and experiential approach was made and no statistically significant difference was found. The possible explanation is that experiential learning approach requires or raises different students' attitude from attitude during case based teaching approach. The real-life cases are always complex problems in contrast with case studies, which are model problems. Case studies can be completely invented or simplified focusing on specific didactic aim. On the other side the real-life cases or, according to Heath (2006), complex cases include mass of data, much of which is irrelevant. "The problem for the student is to distinguish the vital issues from a number of superficial ones ..." (Heath, 2006, p. 14). Because of the not expected complexity of the solved problem in real-life cases students often chose "typical short-circuit" (Ohmae, 1987, p.20), which means they skip all the stages of critical thinking and use just three of them: phenomena, draft plan of actions, and implementation. According to Ohmae (1987) all stages of critical (strategic) thinking are: phenomena, grouping, abstraction, determination of approach, provisional formulation of hypothetical solutions, validation or rebuttal of hypothetical solutions, emergence of conclusion, giving concrete form to conclusions, draft plan of actions, and implementation. The complexity of real life forces students to use more creativity, so more ideas rise and students are forced to make decisions. Because of their individual uncetainty, insecurity from the real life situation the need for sharing is higher and therefore competencies of

building relationships is built up. From the same reason different opinions may come which revitalize the competency of dispute settlement.

Development of group competencies which we can describe as behavioural or soft skills competencies within experiential learning supports Joshi, et al. (2003) who say that students typically do not have real-world experience in the field they study. Within this situation experiential approaches can help. "Learning and teaching methods need to bring to life organizational contexts the typical student lacks in personal experience" (Joshi, et al., 2003). But only under the condition all basic managerial competencies are alredy mastered by students so they can focus only on acquiring new not yet experienced competencies or level of competencies already acquired.

Competencies within case studies combined with experiential exercise

Planning, organizing, delegation, transfer of information, presentation of opinions, written communication, learning by doing, creativity, perspective, self-knowledge, problem solving, quality decision making, early decision, cope with uncertainties, critical thinking, business issues knowledge, specific field competencies, co-creation of an effective team, dispute settlement, and issue instructions are competencies which were proven as significantly different between beginning and the end of course with case study learning in combination with experiential exercise.

The combination of case based teaching approach and experiential learning in the form of experiential exercise might look like the best solution for the development of students managerial competencies because of vast number of affected competencies. But the limitation of this study is fact that this result is given by one, specific experiential exercise. Team re-shuffle is orientated to teamwork because all managerial competencies are supposed to be used during team work. If this condition is met, the experiential exercise within the case based learning will work.

Combination of case study teaching and experiential learning bring broader development of managerial competencies. These two teaching strategies used together bring intensive learning to students and better learning outcomes. Teachers as "managers of learning" must make a decision whether their field, course, and students will fit such methods' combination and will profit from it.

Conclusion

From the results is obvious all approaches have its own place in higher education curriculum of management teaching/learning. It is important to realise that numbers of affected competencies by each approach are not important. Case based approach is really suitable for developing the basic students' managerial competencies which can be developed to a higher level by combination of case based approach and experiential exercise. And experiential learning itself works only if the most of managerial

competencies is already managed by students at the sufficient level. What is important is tailoring the curriculum so graduates can succeed in the labor market. Therefore all the teaching method must come in the right time for the right audience.

ACKNOWLEDGEMENTS

This study is supported by the Ministry of Education, Youth and Sports of the Czech Republic (Project No. MSM 6046070904).

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