BLENDED AND "PURE" ELEARNING CONCEPTS IN MANAGERS' EDUCATION

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Abstract

Elearning is an evolving, dynamically and rapidly changing educational opportunity (Popescu, 2012). Application of the right form of eLearning offers a unique opportunity to satisfy students' needs in a better way. The purpose of the present study was to examine differences in the students' preferences and perception of eLearning in its "pure" and blended form.

There was used quantitative approach in this paper. We used COLLES questionnaire to measure student preferences and perception of relevance, reflection, interaction, tutor support, peer support and interpretation. The sample of the study consisted of 283 full-time and part-time students. Convenient sampling procedure was used. The data were collected during the academic year 2012/2013.

Results suggest implementing blended form. From the students' point of view, it was preferable in 3 factors, while pure eLearning only in 1 factor. Two factors were undecided. The biggest difference was measured in peer support factor, therefore there is a need to concentrate on this factor in eLearning's implementation strategy.

Key words: "pure" eLearning, blended, COLLES, higher education

JEL Code: M10, I23

Introduction

Nowadays, the higher education marketplace has become much more competitive (Jones & O'Shea, 2004). Problems with growing numbers of universities and decreasing number of students and funds force us to find out new solutions in knowledge distribution. The increasing competition must not result in effort of quantitative growth, but it also has to lead to better quality, accessibility and flexibility of educational services.

Current generation of students can be described with term "on-line generation". For them, Internet is the primary source of information and knowledge and also a platform for exchange of experiences. Also because of these reasons, eLearning has obtained its irreplaceable place in current higher education environment (Dobbs, Waid, & del Carmen, 2009). ELearning, as an innovative method of education originally designed for distance learning, is also used in face-to-face education, today.

This paper focuses on differences in the students' preferences and perception of eLearning in its "pure" and blended form. Based on the findings we would like to answer the question which form of eLearning is best to implement as a new distribution channel in managers' education?

1 Research background

We use the term eLearning in its "pure" form for courses where most or all of the content is delivered online - without face-to face meetings. ELearning in this form could provide a viable choice and an enriching experience for students (Dobbs et al., 2009) and offer the new opportunities in their interaction with peers and teachers outside of the classroom (Vaughan, 2007). The others advantages of this type of delivery could be summarized as: resolves problems with overloaded classes; offers flexibility in respect of time of learning; enhances the students' ability regarding acquiring knowledge by themselves; improves information retention; enables education for local students in remote destinations; increases the number of enrolled international students; reduces costs of education per student; serves students with special needs (Galal, 2011). On the other side, arguments against eLearning in its "pure" form, according to scholars, are: a lack of face-to-face interaction between students and teachers (Fearon, Starr, & McLaughlin, 2012; Jara & Harvey, 2009), as well as between teaching staff (Giurgiu, Popa, & Negrea, 2012); unpreparedness of staff members; lack of students' self-discipline or technical problems (Galal, 2011). ELearning course teams also require a stronger definition of coordination, communication and planning strategies, as well as a clearer definition of leadership than in face-to-face courses (Jara & Harvey, 2009).

Blended learning as a novel trend in higher education integrates face-to face and online learning (Ayala, 2009). It combines unrestricted use of learning sources anytime and

also direct interaction with peers and the teacher in the classroom (Delialioglu & Yildirim, 2007); offers enhancement of the teacher and student interaction and more flexible teaching and learning environment; the learning environment forces continuous improvement and increases student engagement in learning (Vaughan, 2007). According to Young (2002), blended models appear less controversial among faculty members.

Assuming the allegations of Allen and Seaman (2007), proportion of the content delivered online in "pure" eLearning is more than 80% of all content and in blended form it is typically 30-79%.

2 Methods

COLLES questionnaire (Constructivist On-Line Learning Environment Survey) in an actual form was used to measure students perceptions in six factors: relevance (How relevant is on-line learning to students' professional practices?), reflection (Does on-line learning stimulate students' critical reflective thinking?), interaction (To what extent do students engage on-line in rich educative dialogue?), tutor support (How well do tutors enable students to participate in on-line learning?), peer support (Is sensitive and encouraging support provided on-line by fellow students?) and interpretation (Do students and tutors make good sense of each other's on-line communications?). Questionnaire consisted of 26 items (4 items per factor and two items for time which participants incurred to complete the survey and for other participants' comments). Likert's scale, with responses ranging from 1 = almost never to 5 = almost always, was used in the items 1-24. As Taylor and Maor (2000) claimed questionnaire was designed to support the use of the World Wide Web for teaching in higher education and to investigate the quality of online learning environments.

Data were collected during academic year 2012/2013 in two groups of 283 participants at the end of the courses. First group of participants consisted of 164 full-time students. Blended form of eLearning was used in this group. Face-to-face meetings were supplemented with on-line content within approximately 43% measured by task solving time. Second group of participants consisted of 119 part-time students. ELearning was used in its "pure" form in this group. Except of first instructional meeting, all content was delivered on-line. We used LMS Moodle for on-line delivery. Both groups (courses) were conducted by one teacher. Table 1. presents sample profile deeply.

Tab. 1: Sample profile

	Full-time students		Part-time students		Sum	
Gender	N	% of Total	N	% of Total	N	% of Total
Male	31	10.9540	29	10.2473	60	21.2014
Female	133	46.9965	90	31.8021	223	78.7986
Sum	164	57.9505	119	42.0495	283	100.0000

Source: authors

However age and nationality was not measured, participants were in ages of 20 - 32, full-time students were mostly Czechs except one Russian and one Latvian, part-time students were Slovaks. Convenient sampling method was used.

The hypotheses were formulated as follows:

- H1: Different type of delivery (Pure, Blended) have different effects on students perception in terms of x (relevance, reflective thinking, interactivity, tutor support, peer support and interpretation): $P(x) \neq B(x)$.

- H2: Better results (students perception) are achieved in blended (B) form than in pure form (P) in terms of x (relevance, reflective thinking, interactivity, tutor support and interpretation): $P(x) < B(x)$.

- H3: Better results (students perception) are achieved in pure form (P) than in blended (B) form in terms of x (relevance, reflective thinking, interactivity, tutor support and interpretation): $P(x) > B(x)$.

The data were analyzed using a SAS JMP8 software.

Described methodology had some limitations. Convenience samples can be used for pilot studies, but caution should be exercised in interpreting their results (Malhotra & Birks, 2007). Also, some deviations may arise due to the Slovak language used in courses.

3 Results and discussion

The research process started by calculating questionnaire's reliability. A Cronbach's coefficient alfa test was used. The test showed that internal consistency of entire questionnaire was good (0,8533). Because of coefficient's tendency to increase with an increase in the number of scale (Malhotra & Birks, 2007) the reliability of individual factors were calculated too. As questionable appeared factors: relevance (0,6843) and tutor support (0,6580), but only a value of 0,6 or less generally indicates unsatisfactory internal consistency reliability (Malhotra & Birks, 2007). Others sub-scales had Cronbach's coefficient alfa above 0,7 (reflective thinking = 0,7296; interactivity = 0,8774; peer support = 0,7656; interpretation = 0,7475), therefore results were acceptable.

The next issue was to assess whether data were normally distributed as a basis for a decision on further steps. Shapiro-Wilk W Test was conducted. As test showed, data were significantly normally distributed.

As shown in Table 2., results supported first hypothesis: $P(x) \neq B(x)$ in factors: reflective thinking (t Ratio -2,29466; DF 217,8695; t-value 0,02270), interactivity (t Ratio -3,55639; DF 261,9413; t-value 0,0004); peer support (t Ratio -5,68346; DF 240,4170; t-value less than 0,0001) and interpretation (t Ratio 2,7411; DF 235,3238; t-value 0,0066).

Tab. 2: Results of the t-tests of hypothesis 1: $P(x) \neq B(x)$

Factor	t Ratio	DF	Prob > |t|
Relevance	0.078039	208.0684	0.9379
Reflective Thinking	-2.29466	217.8695	0.0227
Interactivity	-3.55639	261.9413	0.0004
Tutor Support	0.3313	243.7455	0.7393
Peer Support	-5.68346	240.4174	<0.0001
Interpretation	2.7411	235.3238	0.0066

Source: authors

Lack of difference in relevance factor could be related to the decreasing age of part-time students. Although age has not been studied, the age of both groups was comparable. It is obvious that it affects the equivalent working experience of participants and therefore perception of course content's relevance.

Lack of difference in tutor support factor is in compliance with Kanuka's opinion (2001) that it is irrespective of whether the learning takes place in a face-to-face or distance-delivered setting. When there is good communication between the learners and instructors, learning activities that connect essential elements together will result (Kanuka, 2001).

The results supported second hypothesis: P(x)< B(x) in factors reflective thinking (t Ratio -2,29466; DF 217,8695; t-value 0,0114), interactivity (t Ratio -3,55639; DF 261,9413; t-value 0,0002) , peer support (t Ratio -5,68346; DF 240,4170; t-value less than 0,0001). Results are presented in Table 3.

Tab. 3: Results of the t-tests of hypothesis 2: P(x)< B(x)

Factor	t Ratio	DF	Prob < t
Reflective Thinking	-2.29466	217.8695	0.0114
Interactivity	-3.55639	261.9413	0.0002
Peer Support	-5.68346	240.4174	<.0001
Interpretation	2.7411	235.3238	0.9967

Source: authors

The results of the third hypotheses' test, presented in Table 4., shown, that "pure" eLearning was better accepted only in interpretation factor (t Ratio 2.7411; DF 235,3238; t-value 0,0033). However, this result could be ascribed to a lack of slovak language understanding in full-time students' group (blended learning form).

Tab. 4: Results of the t-tests of hypothesis 3: P(x)> B(x)

Factor	t Ratio	DF	Prob > t
Reflective Thinking	-2.29466	217.8695	0.9886
Interactivity	-3.55639	261.9413	0.9998
Peer Support	-5.68346	240.4174	1
Interpretation	2.7411	235.3238	0.0033

Source: authors

Table 5. presents mean differences. The biggest difference was measured in peer support factor (0,56975). Therefore, if faculty will decide to implement "pure" eLearning, to concentrate on this factor and to encourage peer support will be the main challenge.

Tab. 5: Mean differences P(x)-B(x) in absolute value

Reflective Thinking	Interactivity	Peer Support	Interpretation
0.22392	0.39152	0.56975	0.19337

Source: authors

Results suggest implementing blended form. From the students' point of view, it was preferable in 3 factors, while pure eLearning only in 1 factor. Two factors were undecided. Based on the results, we agree with the statement of Jara and Harvey (2009) that course satisfaction for blended delivery is greater than the course satisfaction in the "pure" eLearning delivery.

Conclusion

The complexity of blended courses caused, that faculties are discouraged from teaching this type of courses (Ocak, 2011). However, this form of eLearning delivery could reduce a classroom time, bring better satisfaction of students and last but not least increase competitiveness of faculty.

Based on the results, we could answer the question "Which form of eLearning is best to implement as a new distribution channel in managers' education?" with recommendation of blended form of eLearning.

Finally, we can confirm the great potential of eLearning in education of managers and predict that in the coming years it will be the one of the most important method of knowledge delivery.

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