Online Learning Method in Hue University's College Of Education With Credit System In Vietnam: Actual Situation And Solutions To Improve Efficiency

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Abstract: From analysis of some reality and conditions in teaching and learning in the credit training system of informatics subjects in Hue Unniversity's College of Education which the author taught online via the website www.elearning.dhsphue.edu.vn, the author has suggested elearning organizational model with support of internet and web technology for two objects: students for none Specific Purposes (NSP) learning "basic information technology subjects" and IT students for Specific Purposes (ITSP) learning "software engineering subjects". From statistics of the results and feedbacks from the learners of the kinds of training, the author has suggested elearning organizational model appropriate with the credit training systems in Hue Unniversity's College of Education.

Keywords: E-learning, Education, Credit system, Online learning in Vietnam.

1. Introduction

Currently the IT application in teaching has been implemented most of the provinces, the regions and the schools. Particularly, the IT application in the universities is imperative when switching from traditional training to credit system. There are a lot of software to be deployed to support building e-lesson as PowerPoint, Violet and supporting software to multimedia: Windows Movie Maker, Macromedia Flash. But that is not meeting the development requirements of credit system such as a Learning Management System (LMS) with many features that enable students and teachers to online communication with each other to promote positive and proactive in teaching and learning. We have chosen Moodle software and building online learning system through the domain name Elearning.dhsphue.edu.vn. We have organized the teaching on this system and were used the features as follows: [2, page 2]

1.1. Learners

- Learners are attending and proposed topics for discussion (by forum).
- Download lectures and supporting software.
- Teamwork (by group).
- View and receive feedback from other learners or teachers (by mail, chat)
- Their schedule and activities in school (by report).
- You can do the online test with questions: multiple choice, essay...And receive answers, results on the system (test).

1.2. Teachers

- Make lesson and use multimedia technology by web tool.
- Upload materials, exercises.
- Monitor each student activity.
- Creating online tests; support and view the student results.
- Allow create topics and exercises. Students can upload group exercises. Teachers comment through email.
- Export and mark results to word, excel to send to campus.

In particular, the evaluation of results and academic sense is objective as well as training skills: self-learning, self-study and teamwork.

2. Actual situation of IT application in Hue Unniversity's College of Education[3, pg.1-3]

2.1. The curriculum, textbooks, lectures

The credit system curriculum applied from 2009 for 3rd and 4th year students. In 2012 is the first year applicable for all students in Hue Unniversity's College of Education. So credit system curriculum just perfect and complementary to match.

Textbooks, lectures deployed in late 2010 with limited budgets, so only some courses or majors are selected and standardized into lectures and multimedia curriculum instead all. Online learning through the domain name Elearning.dhsphue.edu.vn after two years of implementation, its effectiveness has still not as expected, namely:

- The lessons, textbooks build ExE software (elearning standard) for mostly over 40 years old are accepted, but it is not yet being applied e-lessons by elearning standards.
- The lessons by elearning standard are uploaded in the domain: elearning.dhsphue.edu.vn limited: in 2 years with 9 teachers create lessons, 4 teachers have uploaded full lessons. Among, 1 teacher is teaching online in the system, others are upload lessons to students read or download (elearning.dhsphue.edu.vn) while the efficiency of online learning brings proven by the above results, many universities in Vietnam have been applied. In Hue University, Hue Learning Resource Center and Youth Union-University of Medicine and Pharmacy has organized a conference: "application information technology building online lessons" in young lecturers in 04/2011.
- The construction of e-lessons from website Hue University: Elearning.hueuni.edu.vn, from Violet, ExE software... not to be integrated into the system..

2.2. Lecturers and IT application

Although, the campus is very concerned about improve IT skill issue for staff, especially the teaching staff, however the reality is:

Currently, young teachers (rate 50% all staff) have the number of hours of teaching very little. Thus, when old teachers retire or change working, then young teachers have not taught the course immediately, especially accumulated experience and practical method issues.

Experience of old teachers is much, but IT application skills are very slow, while your teachers reversed. Therefore, IT application skills have difficulties, problems (too interested in the techniques and tools rather than the quality of lessons and effective of lesson with student).

2.3. IT skills

IT skill of students is very slow. Initiative and self-study are limited... Usually, they still are learning to deal or wait near exam time to review knowledge... more than to equip themselves professional skills and orientation for the future.

2.4. Testing and evaluation

The assessment of teachers is limited and can not checked regularly, the traditional test takes time and effort, so teachers often less investment and monitor the learning process, sometimes evaluation is still sentiment of teachers so quality and objectivity is not high.

2.5. Learning conditions

Currently, conditions infrastructure of campus is limited... Server systems through the domain: elearning.dhsphue.edu.vn weak or interrupted, the Moodle software was faulty about data storage. Low internet speed so you do not allow more students in the same one time (we tested network bandwidth at the lab room about upper 20 computers access causing local congestion). The ability to use the internet and computers of learners are very slow.

2.6. Management and administration of E-learning activities

ELearning system operates by the network manager (network congestion, error system and software, reset the course data, turn off). The administrator will register course for learners, error password, log, re-signed new class...

3. Evaluation results and main solutions

On the basis of analyzing the advantages and disadvantages of traditional method with elearning method, as well as analyze the situation and conditions for implementing elearning form of different learning objects. We organize teaching elearning form throughout the academic year 2009- 2010, 2010-2011 to collect survey and feedback from the learners, namely:

3.1. Evaluation objects

Hue Unniversity's College of Education organizes teaching for full time training, pathway program students for IT major with software engineering subjects and for full time training, in service training students for Non-IT major with basic information technology (General Informatics, Office Informatics) subjects in campus, other location such as: An Giang, Ba Ria-Vung Tau, Dong Nai, Quang Tri province.

3.2. Feedback from learners [4] and evaluation results

The database below is exported from the system elearning.dhsphue.edu.vn by author research by elearning from, including storage of feedbacks to assess and statistics. Checking the authenticity of the information readers can open the link: Elearning.dhsphue.edu.vn (see statistical results and the report of the IP address, the number of participating in learning activities how we can check who is attending online learning).

• Full time training -Information Technology Major Student

Choice	Dislike	Anxiety	Like	Interested	Very interested
%	0%	2.1%	6.3%	20.8%	70.8%

Table 1. Quick Survey: 54 students (Are you excited about the online learning method?)

Table 1 shows that: with a rate "Interested" and "Very interested" are 91.6% the rate is very high.

Content	Good	Pretty	Medium	Poor
Content suitable curriculum	39%	50%	11%	0%
Update and adaptation	67%	17%	17%	0%
Learners-central focus	61%	22%	17%	0%
Coordinate with personal or group form	67%	11%	22%	0%
Self-learn and self-study	61%	17%	22%	0%
Appropriate with credit system	61%	11%	28%	0%

 Table 2. Feedback from learners: 54 students

Table 2 shows that: rate 67% are "**Good** " for questions: "Update and adaptation " and "Coordinate with personal or group form"; rate 100% is "Medium" for all questions. That mean Online learning method means is responsive to requirements of learners surveyed.

• Full time training -Information Technology Non-Major Student

Table 3. Quick Survey: 177 students (Are you excited about the online learning method?)

Choice	Dislike	Anxiety	Like	Interested	Very interested
%	1.1%	22%	15.8	44.6%	16.5%

With a rate 22% are "Anxiety", reason: the first-year students are not familiar with the use of computers. Now, they must use the application from the Internet on computers. With a high rate 61.1% are "Interested" and "Very interested".

Table 4. Feedback from lear	ners:	1// st	udents	
Content	Good	Pretty	Medium	Poor
Content suitable curriculum	45%	41%	11%	3%
Update and adaptation	44%	39%	16%	1%
Learners-central focus	55%	26%	15%	4%
Coordinate with personal or group form	26%	32%	30%	11%
Self-learn and self-study	66%	22%	10%	2%
Appropriate with credit system	47%	35%	15%	3%

 Table 4. Feedback from learners: 177 students

Table 4. shows that: rate 66% and 55% with "**Good**" fit the requirement of learners about "Self-learn and self-study" and "Learners-central focus" but with rate 26% doesn't improve teamwork. Rate 1% to 4% with "Poor" for the most content is an acceptable rate.

3.3. Statistical learning results of general informatics course [4, page. 1-2]

• Traditional group:

Mark		086011B	%	086011A	%	602502	%	085021A	%
	%								
F	17.43	4	8.00	6	11.76	19	20.43	26	26.53
D	48.85	21	42.00	19	37.25	50	53.76	54	55.10
С	26.83	19	38.00	20	39.22	18	19.35	18	18.37
В	6.42	6	12.00	5	9.80	5	5.38	0	0.00
А	0.46	0	0.00	1	1.96	1	1.08	0	0.00
Num	436	50		51		93		98	

• Elearning group:

Mark	Elearn		%	Class	07	Class	07	Class	0/	Class	
	-ing %	20		19	%	12	%	05	%	02	%
F	1.64	3	6.67	7	14.29	11	22.00	0	0.00	3	3.30
D	20.22	17	37.78	21	42.86	31	62.00	10	21.74	27	29.67
С	33.88	20	44.44	15	30.61	7	14.00	23	50.00	39	42.86
В	18.03	5	11.11	6	12.24	1	2.00	12	26.09	21	23.08
А	1.09	0	0.00	0	0.00	0	0.00	1	2.17	1	1.10
Num	183	45		49		50		46		91	

Note: (Mark F: <=3.9; Mark D: >=4, <=5.4; Mark C:>=5.5, <=6.9; Mark B:>=7, <=8.4; Mark A:>=8.5) The statistical results are the final test of students who participate in online courses compared to traditional classroom (to ensure the objectivity of the results, we only choice "General information course" because it is a common course with many different teachers, curriculum content, time, practice... The same, final exam was got from the bank exam, the examiner, the subject completely independent no impact of teachers in the result. We choice final test instead of summative mark because Summative mark = (overall course mark*4+ final exam mark*6) /10 [6], overall course mark is decided at their teacher.



Figure 1. Chart to Comparing level marks from low to high of two teaching forms

The chart shows that the difference between good marks ≥ 8.5 (A) is not significant when comparing the two learning methods; however, there is a clear improvement in marks ≥ 5.5 , ≤ 8.4 (Level B and Level C), and especially rapid decrease in the ratio of the lowest marks (Level F) from 17.43% to 1.64%.

4. Proposed learning process

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4.1. Teachers: Figure 2. Teaching process diagrams



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4.2. Learners: Figure 3. Learing process diagrams

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5. CONCLUSION

E-learning at present and in the near future can not yet completely replace the traditional method, which must have combined to bring high efficiency most students in the teaching - learning process.

Elearning is an approach consistent with credit system, the difficulties when deploying attributed: telecommunications infrastructure (server systems, internet), the level of awareness of students, limited about learning tools... are inevitable, but if Students, teachers, administrators, they are interested the teaching organization will achieve higher efficiency. Next our research will apply this method for high schools where our students will become teachers and expand object: learners in Hue University and in Vietnam.

References

- [1] Le Thanh Hieu, open source application in university learning, Science Conference IT department -Hue unniversity's college of education and IT department – Hue Industrial College, Hue city, 12/2009.
- [2] Le Thanh Hieu, teaching methods innovation in E-learning is right and accordance with credit system in Hue unniversity's college of education. Science conference: "teaching methods innovation with credit system in Hue unniversity's college of education", Hue city, 10/2010.
- [3] Website HUE-UE, Lecturer support system. Retrieved: 01/01/2015; Available from: http://117.3.4.204/diemsv/ql.
- [4] Learning support system, Hue University's College of Education through the website: elearning.dhsphue.edu.vn, author: LeThanhHieu, Statistical report: learning outcomes, evaluation and feedback, Retrieved: 01/01/2015; Available from: elearning.dhsphue.edu.vn.
- [5] Ministry of Education and Training. Regulation of credit system. http://vanban.moet.gov.vn/?page=1.15&script=viewdoc&view=17083&opt=brpage

[6] Evaluation course result in credit system, Hue University's College of Education, http://www.dhsphue.edu.vn/cd_cmp.aspx?cd=010602&id=0

Author Profile

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