

Developing the Course Outline and Lesson Plans for the General Education Module through Blended Learning: A Case Study at University of Education, Ho Chi Minh City, Vietnam

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Abstract The article demonstrates a study at Ho Chi Minh City University of Education in order to improve the General Education module with the application of Blended learning. Questionnaires have been employed with the sample of 200 students who participated in the pedagogical training program to examine their perceptions and needs on related issues. In addition, theoretical study and empirical research methods were also used to establish the theoretical foundation and confirm the effectiveness of the developed products. The development of the General Education Module with Blended learning has been conducted in 5 steps: analyzing the current situation, developing detailed outlines, designing lesson plans, testing – implementing and evaluating the module. In the context of changing university training programs in Vietnam, the development of modules such as Blended Learning for General Education in the form of Blended Learning is necessary. It can contribute to the increase of the efficiency, the higher outcomes of self-study, the gain of the opportunities for interaction, therfore, the learning results are enhanced.

Keywords: developing module, general education module, blended learning, teacher training curriculum

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1. Introduction

With Bachelor Training Program, the modules of Education play an important role, establishing a foundation for students to form teacher competencies [1]. Among the modules of Education Studies, the General Education Module one is considered as the foundation to provide basic reasoning on educational activities and develop pedagogical thinking and professional attitudes. At Ho Chi Minh city University of Education, due to the need of balancing between the foundation courses and the modules on profession, the number of credits of General Education has been reduced to 2 credits (equivalent to 30 periods). However, this module is expected to ensure the training objectives and content which was previously established in order to maintain the quality. The school administrations and the faculty members have conducted a great deal of discussion to find satisfactions solutions to cope with the current situation.

The invention of the Internet has positively enhanced educators to diversify interactive activities with learners,

typically in the form of Blended learning. Blended learning is basically considered as "a combination of an in-class topic and the implementation of technology, including learning via the Internet" [2]. When organizing training in this form, instructors frequently have to combine learning objectives in class with virtual learning and self-study.

A large number of studies have confirmed the great advantages of Blended learning in the undergraduate programs such as promoting the flexibility, creating more time for discussion, developing self-study and communication skill in virtual contexts [3,4]. Learning outcomes in the blended-learning classes have been proven to be higher than that of the traditional classes. Obviously, this form has its limitations. For example, it increases the workload for the faculty, creates stress among students with more learning tasks, raising issues on teachers' intellectual property and privacy [5]. According to Horn and Staker (2014), there are four typical models in the implementation of Blended Learning: Rotation model, Flex Model (flexible model), A la carte model (pre-set model), and Enriched Virtual Model [6]. To promote the effectiveness of Blended learning, it is necessary to ensure the following factors: the positive attitudes and capacity of lecturers in terms of using appropriate technology

facilities, the appropriate technological infrastructure, and the coordination among stakeholders [3]. In Blended Learning courses, the applications ranging from simple to complexity; for example, teachers can use Facebook to help students share assignments and learning projects [7]. When developing courses in the form of Blended Learning, educators can follow five steps: analysis - design - development - evaluation – transferring [8].

Regarding the advantages mentioned above, it is promising to develop and examine the *General Education Module* with the implementation of Blended learning at the University of Education Minh. Our research focuses on the outline development and redesign of lesson plans.

2. Methodology and Methods

With the limitations of research contexts, only 3 methods were employed: theoretical studies, questionnaires and experiment.

2.1. Theoretical Research Method

Theoretical research is used to explore the history of the problem study, choose an appropriate theoretical framework as a foundation to investigate and propose a model development for the module. We have surveyed studies on course development with the employment of Blended learning, especially at the tertiary level in Vietnam and over the world recently. From the results of the search, we analyzed, evaluated and used the information for the above purposes.

2.2. Questionnaire

Questionnaire was considered as the main method to find out learners' perceptions and needs about organizing General Education Module via Blended learning. 200 students from Ho Chi Minh City University of Education in January 2020 and the sample distribution is displayed in the Table 1.

Faculty	Gender		Average hours of Internet Acess/ Day			Computer Skill (Self-Evaluation)				T. 4.1				
	Male	Female	< 1	1-2	3-4	5-6	> 6	Not good	Not very good	Neutral	Good	Very good	Total	
Natural Science	17	33	2	3	18	18	9	2	7	29	11	1	50	25,0
Social Science	24	26	7	12	15	11	5	10	7	10	15	8	50	25,0
Languages	17	49	0	2	29	22	13	3	15	34	10	4	66	33,0
Specialized Major	11	23	0	3	14	7	10	3	12	7	6	6	34	17,0
Total	69	131	9	20	76	58	37	18	41	80	42	19	200	100%
	34,5	65,5	4,5	10,0	38,0	29,0	18,5	9,0	20,5	40,0	21,0	9,5	100%	

Table 1. Research Sample in Reality

After survey collection, data was processed with SPSS software. The reliability coefficient of the questionnaire is 0,858 (good use of trustworthiness). The average score was ranged in five levels: 1-1,80: Disagree/Unsatisfactory; 1,81-2,60: Do not completely agree /not very satisfactory; 2,61-3,40: Indecisive; 3,41-4,20: Quite agreed/relatively satisfactory; 4,21-5,0: Strongly agreed/very satisfactory.

2.3. Experimental Method

After developing the outline and designing teaching plan for Blended learning, a class of freshmen joined the study. The experiment took place in 4 weeks (one session per week - 4 periods). At the end of the experimental process, a questionnaire was used to collect the evaluation of 31 students who had completed the module. The content of the survey included: the objectives, content and strategies. Because of the research contexts, interviews and products of learners were not conducted for a more comprehensive and in-depth assessment. This is also a limitation of this study.

3. The Results of the Study

3.1. The Concept of Module Development with Blended Learning

Educational program is a document which consists of the following elements: educational objectives; the scope, level and structure of learning content, learning methods and organizational forms, and the assessment of learning outcomes [9]. Educational programs are not permanent but kept changing over time, depending on the needs of the stakeholders and the reality. Therefore, program development (whether it is a training program or a major-related program) is an important job and it should be done continuously. Developing modules with Blended learning is the process of evaluating, reviewing and improving the course curriculum at tertiary level by integrating direct learning into classroom activities by means of the Internet in order to promote higher training efficiency.

3.2. The Characteristics of the General Education Module

The Introduction to Educational Studies Module at Ho Chi Minh University of University is designed for students who participated in the Education Science and Teacher Training Program. This module includes 20 theory periods, 20 discussion-practice periods and 50 self-study periods (equivalent to 2 credits).

The module aims to establish a system of basic knowledge and skills about human education. The basic content in this module involves the nature, functions and missions of education; the role of education in the formation and development of moral; the subject of research and the basic concepts of Education; the structure, mission, nature, motivation, principles and system of teaching and educational methods from the traditional and modern perspectives.

The time allocated for the module is 8 weeks. The lecturers have 4 periods to organize face-to-face activities. Regarding testing and assessment, the course consists of 2 types of assessment (40%) with individual essay, 2 group exercises, and the final assessment (60%) with the final essay.

3.3. The Process of Developing General Education Module with Blended Learning

There are many models for developing educational programs over the world, such as the Tyler model with 6 basic steps: identifying the general exploratory goals, identifying the specific educational goals, choosing the learning experience, organizing learning experiences, instructing and evaluating learning experiences. There is another Taba model with 5 specific steps [10]:

- + Step 1: perform the diagnosis needs, set goals, select and organize content, select and organize learning experience, assess content with educational means and methods, check the balance and order.
 - + Step 2: test the test program
 - + Step 3: repair and add experimental programs
- + Step 4: outline the principle and give some recommendations for content selection, organize educational activities and necessary steps to implement the program
- + Step 5: apply and introduce the program to new groups In terms of developing a module program Vietnamese universities, the above two models were adapted to build a scientific and feasible process. This process consists of the following 5 steps (Figure 1):

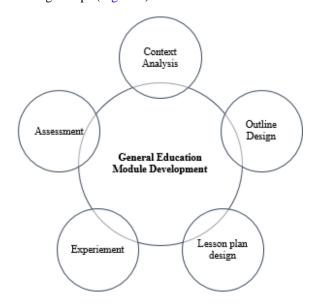


Figure 1. The process of General Education Module development with Blended learning

3.4. Data Analysis on the Survey Results

In the first step, we focused on understanding the perceptions and needs of students about the study problem. To understand the perceptions, 19 questions about benefits and limitations of Blended learning were used to get

students' opinions. The results showed that students have a high level of agreement with the given statements (mean is 4,10 - quite agree). Among the items, the most agreed comments was "Increase the ability to use technology by teachers and students" (4,50), "Requires teachers and students to have skills to use appropriate technology" (4,41). Two statements "Students are more interested compared to traditional learning models (face-to- face)", "Teachers and students could feel under psychological pressure (to spend time outside the schedule)" were marked with average scores. The lowest number was still in the range of "quite agree" (mean 3,87 and 3,76, respectively). Thus, it can be seen that students showed a high awareness of Blended learning and it was considered a prerequisite for the development of this module (see Table 2).

Table 2. Avarage score of learner awareness of Blended learning

Table 2. Avarage score of learner awareness of Blended learning						
Content	Mean	Standard deviation				
1. Learner increases active learning and complete learning tasks.	4,06	0,83				
2. Learner actively adjusts learning speed according to his needs.	4,15	0,76				
3. Learner improves communication skills (faceto-face, online).	4,08	0,91				
4. Learner improves critical thinking skills (due to the increase of in-class discussion).	4,14	0,85				
5. Learner improves cooperation skills (due to groupwork activities and projects).	4,26	0,76				
6. Learner acquires knowledges more profoundly.	3,90	0,86				
7. Learner gets frequent support from teachers and peers.	4,00	0,83				
8. Learners are more interested than in the traditional learning (face-to-face).	3,87	1,05				
9. It creates more motivation for teachers.	4,26	0,79				
10. Teacher improves learning management.	3,89	0,96				
11. Teacher enhances support responsibility for learners.	4,03	0,84				
12. Blended learning meets the needs of credit program (reducing the direct meeting).	4,10	0,98				
13. Blended learning creates a more objective assessment (with the integration of online quiz, peer assessment).	4,14	0,85				
14. Blended learning increases the technology competency of teachers and students.	4,50	0,70				
15. Blended learning requires teachers and students to have suitable technology skills.	4,41	0,74				
16. Blended learning requires technology equipments (personal computer, Internet Connection, Virtual Apps).	4,24	0,92				
17. Students and Teachers can face pyschological pressure (time outside classroom).	3,76	1,08				
18. Teacher has to spend a lot of time on lesson plan (both online and offline).	4,10	0,91				
19. Blended Learning can reduce training cost (less time face-to-face, reduce the cost for facilities).	4,01	1,03				
Total Mean	4,10	0,45				

To understand students' needs, we asked them about 22 issues related to the course curriculum development, objectives, content, methods, means and assessment. The types of interactive activities in and outside classroom

were also focused on exploring the perceptions. The results are shown in Table 3.

Table 3. Mean Score on learners' needs about The General Education Module with Blended learning

Content	Mean	Standard deviation
1. It is necessary to understand learners' needs and characters when building the module.	4,39	0,85
2. The purpose of the Module is to help students understand the basic reasoning of Education Studies.	4,29	0,79
3. The purpose of the Module is to form basic pedagogical skills for students.	4,49	0,72
4. The aim of the Module is to form active learning attitudes for students.	4,40	0,69
5. The content is kept up-to-date with new reasoning.	4,31	0,74
6. Teacher uses a large number of techniques and active teaching methods in class (groupwork, problem-solving, brainstorming,).	4,30	0,73
7. The purpose, content, methods, means – resources, assessment are introduced in class and on the website.	4,31	0,81
8. The introduction and guidelines are available on the website.	4,39	0,70
9. Some videos for theory content are uploaded on the website.	4,47	0,74
10. After watching videos, learners take the quiz.	4,18	0,81
11. Documents, supplementary materials are provided on the course website.	4,53	0,69
12. There is discussion forum on the Website.	4,32	0,82
13. Assignments are submitted via the website instead of direct submission.	4,16	0,94
14. After a chapter, there is an online quiz.	4,50	0,97
15. Some of educational online activities are conducted in classroom.	4,06	0,93
16. When assigning tasks, teachers send a document of instruction and assessment criteria.	4,50	0,81
17. Time for submission is set.	4,42	0,80
18. There is rule of minus- bonus for deadline submission.	3,92	1,10
19. There is the rule to give bonus marks for students who are active in class and online classroom.	4,34	0,85
20. Teacher sets time in class for discussion, practice and skill training.	4,28	0,78
21. Teacher spends time in class to discuss and evaluate learner assignment results.	4,27	0,81
22. In assessment, there is a combination of teacher and peer evaluation.	4,34	0,77
Total Mean Score	4,30	0,45

In general, students at the Ho Chi Minh City University of Education expressed a high demand for Blended Learning in the *General Education Module* (4,30 - very high demand). When analyzing in details, students were interested the most in online learning resources and testing – evaluation, specifically on these statements: "Supplementary documents and references are provided on the course website." (mean = 4,55), "After each chapter there are online multiple-choice tests." (mean = 4,50), "When assigning assignments, teachers have attached the

instruction and assessment criteria" (mean = 4,50). The statement "There are rules of reward and punishment for violatting the time of submission" received the lowest mean (3,92), but was also "quite desired". From the results of this demand survey, in the process of building detailed outlines and designing lesson plans, we took notes so that the module can increasingly meet the needs of learners.

In addition, the present detailed program for the General Education Module was also analyzed in terms of the advantages and limitations. Regarding the advantages, the program aims to build the foundation on professional qualifications and competencies, logical content, and it covered the general theoretical system of Education (education in the general meaning, education in the narrow contexts, and teaching). It also focuses on self-study time. However, with the large amount of learning content, the program only focuses on distributing in 8 inclass sessions, while the self-study tasks are not clear. Additionally, there are no foundation to support the self-study and assessment of these tasks. Therefore, the goal for freshmen to fully comprehend these goals is difficult to achieve.

3.5. Develop Course Outline and Design Lesson Plans

3.5.1. Course Outline Development

Based on the research results from step 1 and the observation of this module process, the research team has rebuilded the detailed outline of the General Education module towards applying Blended learning. Basically, the objectives and contents of the course were remained unchanged, only methods, teaching facilities, learning materials, and assessment were adjusted. In details (see Table 4):

Table 4. The overview of course outline development with Blended Learning

Tittle	Preview Content	Adjustment		
Module aims	quality, competency			
Module Content	3 chapters			
Teaching Plans*	8 weeks with the main strategies: presentation, conversation, groupwork in class.	8 weeks with the main strategies: conversation, group teaching, seminar (in class), self-study, material research, assignments, surveys on edmodo.com Learners spend at lease 6 hours on self-study (at home/ library and online class)		
Materials*	Textbooks and printed books	Textbooks, printed books, pdf. file, teaching video, online quiz, quality survey responses.		
Testing, assessment*	40% process evaluation (group presentation, individual assignment) – 60 % final test (written assignemnt)	60% process evalutaion (online quiz, group presentation) – 40% final test (written assignments)		

^{*} Changes in the module outline.

Table 5. Overview description on lesson plans in the General Education with Blended Learning

Unit	Aim	Basic Content	Basic Activities	Means and Methodology
Chapter 1: General Issues on Education (6 periods face- to-face – 6 periods on self- study)	- Grasp the basic scientific perception of education and eduactional studies Present the history, nature and characteristics, role of eduction, the research targets of Educational Studies; - Distinguish different basic concepts of Educational Studies; - Train research skills, groupwork, and presentation skill.	- Education is a specific social phenomenon Educational Studies is a scientific Purpose and roles of education.	- OFFLINE: + Get to know the Module + Explore the history and nature of Education + Examine basic characteristics of education + Examine the roles of education + Examine the science of "Educational studies" + Review the concepts, meaning, of educational goals + Discuss the purpose of Vietnamese education - ONLINE (not sychronize): + Extend research "What makes personality?" + Review old lessons and continue to do research on the new ones	- Methodology: games, presentation, conversation, groupwork, self-study, practice, quiz Means: textbooks, printed books, pdf. files, video, quiz, edmodo.com.
Chapter 2: Common issues on teaching activities (10 periods face- to-face – 18 periods for self- study)	- Achieve scientific perception of teaching activities - Train research skills, groupwork, presentation Present the concepts and structures of teaching activities; - Analyze the nature of teaching; - Present the content of teaching missions Identify the lesson goals Analyze educational rules; - Present the teaching content in the recent years Apply teaching methodolgies and strategies.	- Common issues on teaching activities - Teaching rules - Teaching content - Teaching methodologies and teaching strategies	- OFFLINE: + Open discussion "The missions and nature of teaching" + Design specialized teaching tasks + Discuss on applying educational rules + Discuss on the new high school program + Report new teaching methodologies + Discuss on applying new methodologies - ONLINE (not synchronize): + Get to know motivations and rules of teaching + Understand the overview of teaching methodologies + Online self-study + Explore educational activities	- Methods: presentation, conversation, groupwork, quiz, brainstorming. - Means: textbooks, printed books, pdf. files, video, quiz, edmodo.com.
Chapter 3: Issues on educational reasoning (14 periods face- to-face – 24 periods for self- study)	- Have scientific viewpoints on education Present concepts, structures of educational activities in a narrow viewpoint; - Analyze the nature and characteristics of educational activities; - Applying logically educational methodologies in educational activities; - Train research skills, groupwork, presentation skills.	- Common issues on educational activities Educational rules Educational content Educational methodologies.	- OFFLINE: + Discuss on the overview of educational activities + Understand educational rules + Report on educational methodologies + Apply educational methodologies + Get familiar with situation-handling in education + Apply situation-handling in education + Module summerization - ONLINE (not synchronize): + Online self-study + Module Assessment	- Methods: presentation, conversation, groupwork, seminar, self-study, practice. - Means: textbooks, printed books, pdf. files, video, quiz, edmodo.com.

3.5.2. Designing Lesson Plans

From the revised module outline, we continue to design the lesson plans in details. The focus of lesson design was to build a variety of learning activities, combining direct classroom teaching and student learning activities flexibly on edmodo.com online classes. Classroom learning activities focused on discussion, conversation, problem-solving and practice. Activities in online class is of student interest regarding reading documents, pre-recorded lectures, and responses to learner self-study.

An overview of the lesson plans progress is shown in the Table 5.

3.5.3. Educational Experiment

After designing the lesson plans, the team continued to redesign the materials for students to learn online and move on building the edmodo online classroom. The results from students' opinions on the course of General Education Module with Blended learning after 4 weeks of experiment are shown in the table below.

TT	Assesment				
1		The goals of the module meet my need.	4,29		
2	Module Goals	The goals of the module are well-fitted with outcomes of my major.	4,23		
3	3	The goals of the module are suitable with my level and competency.	4,19		
Genera	l Average Score		4,24		
1		The content suits the goals which were introduced at the beginning of the module.	4,16		
2		Content distribution is distributed logically each week.	4,39		
3	Module Content	Content distribution is distributed logically between in-class and online learning.	4,06		
4		Educational content is well-linked.	4,26		
5	7	Distribution between theory and practice is logical.	4,39		
Genera	l Average Score		4,25		
1		Learning plan is announced in time and sufficiently.	4,42		
2		Learning plan is convenient for my self- study.	4,23		
3	1	Online learning requirements suit me.	4,06		
4	Teaching Organization	Teachers often follow and support us during online learning process.	4,32		
5		Online activities give me learning motivations.	3,97		
6		In-class activities are suitable with the learning content.	4,45		
7		Classroom activities are diverse.	4,58		
Genera	l Avarage Score		4,29		

Table 6. Learners' evaluation on the General Education Module via Blended Learning after the experiment

The average score on the three main contents of the evaluation was above 4,21 (strongly agree). In each group, the factors that were most highly-recommended are these statements: "The course objectives are suitable for the students' abilities and needs." (mean = 4,29); "The content distribution between theory and practice is balanced over the period of time." (mean = 4,39); and the diverse learning activities (mean = 4,58). Although there were no feedbacks from other data collection, the above students' opinions initially confirmed the effectiveness of the General Education Module with Blended Learning.

4. Conclusion

The development of the General Education module with Blended learning can be done in 5 steps: (1) analyzing the current situation, (2) developing detailed outlines, (3) designing lesson plans, (4) testing, (5) implementing and evaluating. Applying the above procedure in this study, although not completely complete, there was positive feedbacks from students participating in the module. In particulary, learners gave compliments on the fullfilment of their needs, the reasonable distribution between theory and practice and the diversity of activities. Some of these initial results were achieved due to the development of the module program which based on the process of understanding learners' opinions, analyzing needs and using scientific foundation to redesign the curriculum and teaching plan.

It can be seen that, in the context of changing university training programs in Vietnam, the development of modules such as Blended Learning in General Education in the form of Blended Learning is necessary. It can contribute to the increase of the efficiency, the higher outcomes of self-study, the gain of the opportunities for interaction, therfore, the learning results are enhanced. In order to effectively implement this process, the organization and the department involved in the module management should be proactive in developing a plan, coordinating with stakeholders in implementing and

improving the the module operation. In addition, it is crutial to listen to the feedback from faculty and students.

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