MINISTRY OF EDUCATION AND TRAINING
HANOI NATIONAL UNIVERSITY OF EDUCATION

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APPLICATION OF INFORMATION TECHNOLOGY AND COMMUNICATIONS TEACHING GEOGRAPHY TO STUDENTS OF CAPACITY DEVELOPMENT ORIENTED PRIMARY EDUCATION SECTOR

Specialization: Theory and methodology of teaching geography
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The dissertation can be further learnt at the following liabraries

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THE SCIENCE WORKS BY THE AUTHOR THAT HAVE BEEN PUBLISHED

1. Tran Thi Ha Giang (2009), *Applying the information technology in improving the capacity of self-study, self-research of the students in teaching social natural science subjects and methodology in teaching social natural science subjects*, Education Journal, Publication 218-Volume 2, pages 21-23
2. Tran Thi Ha Giang (2012), *improving the capacity of self study, self research for students through the application of information technology and communications in teaching geography to students of primary education sector*, national science conference summary record: "renovating the teaching, science research and education management at the colleges", pages 88-96
3. Tran Thi Ha Giang, Pham Viet Quynh (2014), *tendency of applying information technology in teaching social natural, science, history, geography at primary education level*, education journal, publication 337, pages 60-62
4. Tran Thi Ha Giang (2014), *applying information technology and information in educating the response to the climate changes to the students of the Faculty of Primary Education at Hanoi College of Education*, national science conference summary record: "Training to meet the social demand", pages 406-410.
5. Tran Thi Ha Giang (2015), *Organizing the extra-class activities for the students of education*, the Capital Education Journal, No.61, pages 20-21
6. Tran Thi Ha Giang, Pham Thi Quynh Anh (2015), *Developing the capacity in applying information technology and Information in teaching geography to the student of primary education*, Education Journal, Publication 361, volume 1, pages 54-57
7. Tran Thi Ha Giang (2015), *renovating the assessment as per the orientation of developing capacity in teaching geography at primary education level*, Science Journal at Hanoi City University, Volume 1, pages 90-99
8. Tran Thi Ha Giang (2016), *using Edmodo in teaching geography for students of primary education*, the national level conference record summary: "training teachers at the universities of multi-majors to meet the current demands of education renovation", pages 96-106.

PREAMBLE

1. The reason for choosing the topic

The explosion of science and technology in general and information and communications technology in particular have a strong impact on all areas of social life. The application of information and communications technology in education is an innovative way specially interested by many researchers, and pedagogue.

Information technology will be a practical tool to activate the operations of the students in the class lessons, develop self-learning, self-study and support the preparation of lectures for visiting and practice at schools.

The part of geography in the training courses for the primary school teachers have an intensive content, inclusive of the general natural geography, the geography of continents and geography of Vietnam while the class duration arrangement is really limited (12 class periods). Develop the capacity of applying information technology and information in teaching geography for the students have become an urgent need to promote the training progress into the progress of self-training, to assure the quality of the outputs, and the students become the owners of the cognitive process.

With the above reasons, I chose the topic ***"Application of Information Technology and Communication in teaching geography for students of Primary Education-oriented capacity development"*** as the theme of the dissertation.

2. The research tasks and purposes

2.1. Research purposes

Propose and test how the application of information technology and information in teaching geography for students as per the blended learning in order to promote a positive, proactive, creative, and develop the capacity of students in learning, contributing to innovation methods and improve the quality of primary teacher training.

2.2. Research tasks

1. Research the theoretical basis and practical application of information technology and information in teaching geography for students of primary education-capacity development orientation.

2. Give out the requirements and principles of teaching with application of information technology and geographical information modeled combine learning (blended learning)

3. Establish procedures for designing lessons as per the model of blended learning

4. Design a geographical lesson as per the model of blended learning with the assistance of Edmodo study social network

5. Organize the geography learning activities for the students as per the model of blended learning with the assistance of Edmodo study social network.

6. Carry out the pedagogy practice to verify the effectiveness and feasibility of the application of information technology and information in teaching geography to students of primary education by the model of blended learning with competency development orientation.

3. The object and scale of the research

3.1 The object of the research

The research object to the dissertation is the way of applying information technology and information in teaching geography for students of primary education by model of blended learning of competency development orientation

3.2 The research scale

- Limit on the content

+ The dissertation focuses on research of applying information technology and information in teaching geography for students of primary education by model of blended learning of competency development orientation.

+ Apply in the session of geography in the study unit of natural – social basis

+ Some Universities/Colleges of Education train the primary school teachers, college level, (reference)

- The objects of the teaching practice: Students of the Faculty of Primary Education, Hanoi Capital University

- The time of carrying out the teaching practice: Semester II academic year 2013 – 2014 and semester 1, academic year 2014 – 2015.

4. Scientific theory

If the application of information technology and information in geography for geography students of primary education by model of blended learning in a logical manner, ensuring the requirements and principles of teaching, this will be effective, promote positive, proactive, creative, and develop the capacity of students, contributing to improving the quality of primary teacher training in teacher training colleges/universities.

5. Overview of Research Issues

5.1. Information technology and information application in teaching

5.1.1. In the world

IT development history of the world was recorded from about the 1880s, the American inventor Herman Hollerith has introduced a machine that can calculate, store, compare the information on punched cards. Since then, the information technology and information sector has made great progress, creating civilization new era in the history of human development. The educational achievements of the modern world there is a significant contribution of

information technology, it makes the teaching and learning of this there are fundamental changes in comparison with traditional education before.

5.1.2. In Vietnam

In Vietnam, the application of information technology and information in teaching was started in a number of training centers, a number of personal trainers started teaching and learning by computer to computer education in the early 90 of the last century. The application of information technology in teaching have been interested by scientists in research. Many softwares have been built for the teaching process in which Geography is one.

In Primary Education Faculty of teacher training colleges, the application of information technology and information in Geography teaching has been encouraged and interested. Level of performance depends on the capability and enthusiasm in renewing teaching methods of each faculty.

5.2. About the model of blended learning

5.2.1. In the world

2006 is the year of publication First Handbook of Blended Learning of Bonk, Graham, Cross & Moore (The handbook of blended learning environments: Global perspectives, local designs).

After 10 years, the combined learning model has been widely used in the developed countries and the scientific and educational centers in the world.

5.2.2. In Vietnam

In Vietnam, blended learning was introduced in about 2007, was first used in English and Computing courses.

Currently the blended learning has been interested and researched by many scientists, applying in the arrangement of teaching with different subjects.

5.3. Regarding teacher training oriented capacity development

5.3.1. In the world

Articles, books and documents on teacher training approach under capacity development emerged in the 1970s. In recent years, many countries have built Brigadier teacher ordinary occupations, and there are specific directions to capacity development for teachers.

5.3.2. In Vietnam

In Vietnam, the training of teachers in the school, Faculty of Education are being renovated under the direction of professional capacity development outcomes. Primary teacher professional standards have been identified by the Ministry of Education and Training in three articles, 15 standards and 60 criteria

6. Perspectives and research methods

6.1. Research point of view

6.1.1. Dialectical materialism perspective

6.1.2. System, structure perspective

6.1.3. Historical perspective
6.1.4. Practical perspective
6.1.5. Student centered teaching perspective
6.1.6. Teaching technology perspective
6.1.7. Teaching perspective of oriented capacity development

6.2. Research Methods

6.2.1. Methods of analysis, collection of documents
6.2.2. Classification methods and theoretical systematization
6.2.3. Survey methods
6.2.4. Observation methods
6.2.5. Expert method
6.2.6. Case study method
6.2.7. Statistical methods
6.2.8. Pedagogical Experimental Methods

7. The contributions of the dissertation

1. Research and presentation system is the basis of theoretical and practical application of information technology and information in teaching geography for students of Primary Education sector towards capacity development.

2. Established a procedure for designing lessons as per the model of blended learning

3. Established Edmodo study social network to organize the blended learning in teaching geography for students of primary education

4. Design some lessons of geography in the model of blended learning

5. Organized some study activities of geography for students as per model of blended learning

6. Carried out the teaching practice to verify the effectiveness and the feasibility of the application of information technology and information in teaching geography for students of primary education by model of blended learning as per competency development orientation.

8. The structure of the dissertation

Chapter 1: Theoretical basis and information application of information technology and information in teaching geography for students of Primary Education towards capacity development.

Chapter 2: Information technology and information applications in teaching geography with combined learning model for students of Primary Education towards capacity development

Chapter 3: Pedagogic practice.

CHAPTER 1: THEORETICAL BASIS AND PRACTICE OF THE APPLICATION OF INFORMATION TECHNOLOGY AND COMMUNICATION IN TEACHING GEOGRAPHY TO STUDENTS PRIMARY EDUCATION SECTOR AS PER COMPETENCY DEVELOPMENT ORIENTATION

1.1. The issue of teacher training innovation in Vietnam under oriented capacity development

1.1.1. Oriented innovation

Education in Vietnam is implementing radical and comprehensive innovation process so that education is the foundation and driving force of industrialization and modernization of the country, as a condition for promoting human resources text reference as Congress Resolution Ninth nationally determined.

The general orientation for the reform of higher education is reflected in the renewal of teacher training pedagogical schools nationwide. Including macroeconomic issues such as the school network planning, pedagogy, review the training objectives, professional standards, training models and programs, teacher training methods ...

1.1.2. Innovation of training goals

From goals and direction of innovative general education after 2015, the position and role of teachers also change accordingly. the teachers have to move from teaching knowledge to the role of instructing, organizing for students to carry out activities of mastering knowledge, suggesting the ways of discovering knowledge.

Besides the basic functions of teaching and education is the research functions - development is becoming increasingly important for the teachers in modern schools.

1.1.3. Innovation of training program and content

Powerful content innovation of higher education is a modern requirement for the current Pedagogy schools. For the Primary Education sector, the innovation content of training is to focus on developing innovative capacity, practical skills, professional ethics and social understanding, step by step approach and the scientific advanced technology of the world.

1.1.4. Innovation of methods and forms of training

1.1.4.1. Innovation of training methods

Innovation training methods teacher towards promoting positive people in college are characterized by the principle of *"turning the process into a process*

of self-education training". Train future educators, the greater the need to promote the positive, initiative and creativity of learners, promote self-learning, self-study of the students.

The teaching method is considered positive when the interaction between teachers and students, between the members of the class is valued, promoting positive, initiative and creativity of learners, promote self-learning ability and self-study students.

The proactive learning must plentifully use the visual teaching methods, especially the modern teaching methods, to intensify the activities of practice, self research for the students

1.1.4.1. Renovating the training form from the annual result finalization into credit finalization

Renovating the form of training teachers from annual result finalization into the credit finalization is the important policy of the education sector, the key mission of the high education in the recent years, targeting at renovating the training activities, approaching the advanced training modes in the world.

1.1.5. Some methods for renovating the teaching methods

1.1.5.1 Renovating the traditional teaching methods

1.1.5.2 Combining in a diversified manner the teaching methods

1.1.5.3 Applying problem solving teaching

1.1.5.4 Applying situational teaching

1.1.5.5 Applying action orientation teaching

1.1.5.6 Intensifying the use of teaching means and logical information technology in teaching

1.1.5.7 Using the teaching methods to promote the proactive and creativeness

1.1.5.8 Intensifying the use of subject specific feature teaching method

1.1.5.9 Improving the method of proactive learning for the students

1.2. The general issues on competency

1.2.1 The concept on competency

(1) The competency relates to the aspect of targets of teaching: the teaching targets are described through the competencies need formation;

(2) In the curriculum, the study contents and the basic activities are connected to each other to form the competencies;

(3) The competency is the connection of knowledge, understanding, capacity, desires;…

(4) The targets of forming the orientation for selection, assessment on the importance and structuralism of the content and activities of the teaching activities in term of method;

(5) The competency of describing the settlement requesting the content in situations…;

(6) The competencies together with the professional competency forming the general foundation of the educating and teaching work;

(7) The level to the development of competency might be determined in the professional standards.

1.2.2. Classification of competency

Professional competency

Methodical competency

Social competency

Individual competency

1.2.3. The concept on teaching competency

“ The teaching competency is the capacity and will of a teacher who regularly applies knowledge, skills and behavior to promote the study of the students in the best manner. This shall happen as per the goals targeting at the current frame, consisting the constant development of the competency of the teachers in the course design.” (Giertz, 2003, page 94).

“ The teaching competency implies that the teachers from the clear targets and the frames, through the constant development of the teaching and development of individual occupation, supporting and facilitating the study competency of the students in the best manner. This teaching competency also reflects the competency of the teacher relating the cooperation, comprehensive view and making contribution to the development of the teaching method for higher education.” (Ryegard, 2008, page 9).

1.2.4. The basic competency of primary school teachers

* The diagnosis competency
* The response competency
* The assessment competency
* The competency in establishing the advantageous relationship with others
* The competency in deploying teaching curriculum
* The competency in responding to the social responsibilities

1.3. The information technology and information in renovating the method of teaching geography for students of primary education sector under competency development orientation

1.3.1. The basic concepts on the information and communication

Information technology and information show us points of view, the science methods, the means and modern technical solutions, mainly the

computers and the means of communication to exploit and use effectively the information sources in all the social economical fields, culture and human being.

1.3.2. The roles of information technology and communication in teaching

1.3.2.1. The roles in renovating the teaching methods

Information technology and communication have impact by changing the content and method of conveying in teaching, having important roles in supporting the teachers assess and evaluate the study in a comprehensive and objective manner right in the study progress…increasing the activeness in participating in the study of the learners….

1.3.2.2. The roles of renovating the teaching means, equipment

The means applied in information technology and communication in teaching assist the preparation of lessons, organization of teaching and studying of lecturers and students.

1.3.2.3. Renovating in tests, assessment

The use of the multi-choice question test software and the websites serving the tests and assessment assists the test questions, giving correct, object results, can be used for many times, with quick and instant result table….

1.3.3. The significance of applying blended learning in geography teaching

1.3.4.1. Blended learning is being considered as a model of teaching with many advantages, suitable with the tendency of renovation in current education

Blended learning has been becoming a new tendency of the world's education. The applicability of ICT of blended learning is suitable with the current age tendency. The advantages and greatest value of the model of blended learning is the focus on the learners, considering them as the center, improving the competency of self learning.

1.3.4.2. Teaching geography for the students of primary education, suitable with the model of blended learning

The content of teaching geography in the primary education sector is being integrated in many curricula relating to many current affairs in the world and Vietnam and also relate to many other different subjects under the organization and control of the teacher

1.4. Psychological characteristics and awareness of students of Primary Education

1.4.1. Features of psychological development of pedagogic young people and students of Primary Education

1.4.1.1. Development of awareness and intelligence

The nature of awareness of students in general and pedagogic students in particular is to deeply find information about subjects, specific science-specialized

majors to grasp objects, tasks, methods and rules of these subjects to become experts in certain fields.

1.4.1.2. The development of learning motivation

Learning motivation of pedagogic students is dominated by many different factors. Recognizing these factors will shows roles of teachers in organizing learning activities for students and necessity to create interesting, updating and scientific features for learning contents to attract students.

1.4.1.3. Development of personal qualities

Orientation of personal qualities of pedagogic students is closely combined with teaching. Therefore, pedagogic students often form career ideals clearly which are passion for job, kids love, dedication, sacrifice for work, a sense of responsibility, etc. In addition, pedagogic students also have a lifestyle of clarity, nobility, humility, perseverance, love and respect to pupils, etc.

1.4.2. Awareness of students of primary education, Hanoi Metropolitan University

Students of pedagogy faculty often live with their family while study in primary education major, so they are often influenced from their family to their studying; sensitive to changes in culture, education and aesthetic trends, etc. taking place in Hanoi; understand about culture, history and famous places in Hanoi; they are always conscious to foster their love to Hanoi for primary students in Hanoi; they speak non-lisp, non-stutter, non- local accent and have a capacity of organizing teaching activities and extracurricular activities in association to help pupils to contact with the local and apply in real life, etc.

1.5. Primary teacher training at Hanoi Metropolitan University

1.5.1. Training Objectives

1.5.1.1. Overall objectives

- There are the basic qualities of school teachers of Socialist Republic of Vietnam; having adequate professional and operational capability and ensuring requirements of educational innovation. Having potentials to constantly improve their initial training level and strive to meet new requirements.

1.5.1.2. Specific objectives

a. Knowledge:

Clearly understanding basic targets and contents of programs and textbooks of subjects assigned for teaching, etc. Understanding psychological characteristics and physiology of primary school students, including students with disabilities and difficult circumstances.

b. Skill:

Having skills to make teaching plans; organizational skills and implementation of classroom training activities to promote creative and dynamics of students. Having skills to work as form teachers and organizing educational activities outside of classrooms.

C. Attitude and ethics:

Awareness of political ideology with the responsibility of a citizen, a teacher with tasks of building and protecting the country. Ethics, dignity and a healthy and clear lifestyle of teachers; consciously strive in the profession; be honest in work; solidarity in colleague relations; serve for people and students.

1.5.2. Training programs and contents

1.5.2.1. Overview of training programs of primary education with college degree

Training programs for primary education teachers with college decree at Hanoi Metropolitan University have been done in the form of credit system with a total of 93 credits excluding certification as Physical Education, Defense –security education, swimming, English, etc.

Contents of Informatics and IT and telecommunication applications in teaching subjects in primary education are divided into separate modules and integrated in modules of teaching method.

1.5.2.2. Geography in training programs of primary education

- Natural-social science basis modules: students are taught in the first year. Duration for geography includes 12 lessons in class and 24 self-study lessons.

- Natural-social science teaching method 1: Students are taught in the second year. Module refers to the active teaching method, forms of popular organization with Nature - Social science, Science, History, Geography, Environmental education in primary schools.

- Natural-social science teaching method 2: Students are taught in the third year. Geography is divided into two segments based on the primary program includes: Guideline on Geography teaching for 1st, 2nd and 3th classes and Guidelines on geography teaching for 04th and 5th classes.

1.5.2.3. List of geographic lessons in "natural-social basis "module

- Part 1: general natural geography (5 lessons)

+ Lesson 1: Universe and the solar system (1 lesson)

+ Lesson 2: shape, size and structure of the Earth and the consequences (1 lesson)

+ Lesson 3: Movements rotating around the axis, rotating around the Sun of the Earth and the consequences (2 lessons)

+ Lesson 4: Some components of the geographic shell (1 lesson)

- Part 2: Geography of Continents (2 lessons)
  + Lesson 5: Africa, America, Europe (1 lesson)
  + Lesson 6: Asia, Oceania, Antarctica (1 lesson)
- Part 3: Geography of Vietnam (5 lessons)
  + Lesson 7: Natural geography of Vietnam (2 lessons)
  + Lesson 8: Economic and social geography of Vietnam (2 lessons)
  + Lesson 9: Regional Geography of Vietnam (1 lesson)

1.5.3. Current application of Information Technology and Communication in teaching geography under blended learning models in primary education faculty.

1.5.3.1. Application of Information Technology and Communication in teaching

** Office software: Microsoft Office, Open Office*

** General application in teaching*

- Create electronic lecture lessons (Violet, eXe, Adobe Presenter, Macromedia Flash)
- Develop mind maps (Mind Manager, ImindMap, etc.)
- Treat graphics, audio, video (Paint, Picture Manager, Photoshop, Windows Movie Maker, Cool Edit Pro, etc.)

** Software for teaching Geography*

- Use software of Microsoft Encata, GIS, Google Earth, Google Maps, and Google Books to search information and search the world map.
- Use MapInfo to build thematic maps.

** Websites and means for teaching*

- Using website browsers (Mozilla FireFox, Internet Explorer, Coc Coc, etc.)
- Efficient exploitation and use of information and applications on website for geography teaching.
- Use emails
- Design and use websites, create study groups on social networking sites, etc.

1.5.3.2. Application of Information Technology and Communication for teaching under blended learning models

Blended learning models is a new teaching model, access to and use of this model at Hanoi Metropolitan University are more popular, etc.

CONCLUSION OF CHAPTER 1

- Innovation in teaching method in general and geography teaching method in particular is an important task which has been implemented on the basis of innovation as required by the society in terms of education objects and methods.

- Application of Information Technology and Communication in teaching is one of the solutions to renovate the teaching method, improve efficiency of geographic lessons; help students in primary education to improve learning quality through changing learning approach which is self-learning, self-study and self-assessment of learning.

- Use the blended learning method which is one of the best solutions to solve learning problems while time of teaching geography at classrooms is very little in the primary education.

- From summarizing, generalizing and developing theoretical issues, and getting general comments from the application of IT and telecommunication for teaching, the thesis has developed a theoretical and practical basis for research and application of IT and telecommunication for teaching geography, especially the use of blended learning models to teach students in primary education toward capacity development.

CHAPTER 2
APPLICATION OF INFORMATION TECHNOLOGY AND COMMUNICATION IN TEACHING GEOGRAPHY UNDER BLENDED LEARNING MODELS FOR STUDENTS IN PRIMARY EDUCATION TOWARD CAPACITY DEVELOPMENT

2.1. Requirements and principles for application of Information Technology and Communication in teaching geography under blended learning models for students in primary education toward capacity development

2.1.1. Requirements for application of Information Technology and Communication in teaching geography under blended learning models

2.1.1.1. Application of Information Technology and Communication in teaching geography under blended learning models must meet the requirements of high school and higher education innovation and the current primary

2.1.1.2. Application of Information Technology and Communication in teaching geography under blended learning models must meet the requirements of objectives of subjects.

2.1.1.3. Application of Information Technology and Communication in teaching geography under blended learning models must meet the requirements of demands, learning interests; promote positive, self-discipline, initiative, creativity and capacity development of students

2.1.1.4. Application of Information Technology and Communication in teaching geography under blended learning models must build an efficient learning environment.

2.1.1.5. Application of Information Technology and Communication in teaching geography under blended learning models must meets requirements of training occupational skills for primary education students.

2.1.2. Principles for application of Information Technology and Communication in teaching geography under blended learning models

2.1.2.1. Ensure teaching process to aim to" learners"

2.1.2.2. Ensure suitability to competence and cognitive abilities of students under blended learning models.

2.1.2.3. Ensure synchronization of measures affecting the process of teaching geography under blended learning models.

2.1.2.4. Ensure the effectiveness of the application of the blended learning models

2.1.3. Some applications of Information Technology and Communication for teaching geography for students in primary education

2.1.3.1. Using a number of office computer software in preparing geography lessons

Most students are doing lesson assignments, preparing lessons on computer with Microsoft Office software such as Word, Excel, etc.

Students prepare electronic lectures on software to slide in classroom. The most used software is Power Point.

2.1.3.2. Using specialized software for teaching

Some software specializing in teaching as Violet, Hi-Teach, etc. are welcome by schools.

Some software dedicated for teaching are integrated with facilities for teaching as Hi-Teach, Active Inspire, etc. with smart tables, interactive table, etc. also are being actively used.

2.1.3.3. Use the form of game shows on teaching Geography

The biggest advantage of this application is due to students' familiarity with game shows on Television. In a technical perspective, in order to build learning activities like forms of game shows from theme music to screen interface, etc., Primary education teachers and students need to have good IT skills, sometimes need the support of the faculty specializing in IT. Students must use software which can be designed for interface screen and function buttons like in TV game shows.

2.1.3.4. Using software for designing lessons for e-learning

Some software for e-learning is commonly use: Adobe Presenter, Violet, MS Producer, Daulsoft Lecture Maker, etc. With characteristics of primary students are small and not suitable to learn with computers without teachers, so objects to this lesson are only tested and encouraged for students at the final class of primary level for Science, History and Geography for class 4, class 5.

2.1.3.5. Application of IT in assessment geography in primary education

Teachers use some software to mix multiple tests to print out for students to do lesson, namely McMix, TestPro, QuizMaker, etc.

The sections are specifically designed for the direct assessment in the classroom as crosswords, puzzle opens, fill in the blank, columns, etc. are applied to check and evaluate geography regularly and effectively. Checking and evaluation of geography such as assignment of lessons via emails, evaluating students from tested e-lessons are commonly used.

2.2. Applying the blended learning in teaching geography to students of primary education sector

2.2.1 The model of blended learning in teaching geography

2.2.1.1. Concept on blended learning

The blended learning is the learning model combining the strengths of the traditional study method (face to face in class) and taking the advantages of the information technology (online study other than class hours)

2.2.1.2 The features of model of blended learning

There is a combination of the different models of knowledge conveying (face to face or online); there is a combination of technology (the basis is

internet); there is a practice facility like a classroom; the comprehensive activities (online chat), non-comprehensive (email, blog, wiki); group work; combining the different teaching methods; the learners play key role, and self control their study progress

2.2.1.3 The structure of model of blended learning

The structure of this model consists of the blended learning of face to face and online instruction.

2.2.1.3 The levels of model of blended learning

* *Level 1*: The lecturers supply the lectures and give lectures in class, giving support by the instruction documents of subjects to students; the students search for document relevant to the subjects at libraries, internet.

* *Level 2*: Lecturers designs the online lectures and supply to students; students search for documents and update the information of subjects of lecturers by email, forum.

* *Level 3:* The lecturers supply multi-media means to students on the ground of Internet, constructing the online test system to give tests to subjects.

The organization of the teaching of geography to students of primary education by model of blended learning is practiced by the author at level 3

2.2.1.4 The effects of the model of blended learning

* The model of blended learning is the best of class hours and online hours to improve the study results
* Change the teaching methods
* Attract the learners to interaction
* Promote the collaboration at extra-class hours
* Individualize the learning
* Increase the responsibility and management by the learner himself/herself
* Adjust the practical aspects and policies
* Change the teaching and learning models
* The necessary technology for blended learning
* The development perspective of the model of blended learning

2.2.2. Edmodo learning social network

2.2.2.1. Introducing Edmodo learning social network

Edmodo is the largest learning social network that has been developed from 2008.

** The functionalities of Edmodo*

- Share limitless natural resource
- Effective collaboration

- Promote the teaching and learning activities
- Renovate the methods of checking assessing

2.2.2.2 Giving instructions on using Edmodo learning social network

* Instruct the lecturers to design and use Edmodo social learning network for the teaching of geography

* Instructing the students to use Edmodo

- Register Edmodo account
- Manage individual account of students
- Interaction

2.3 Organize the teaching of geography under model of blended learning with the assistance of Edmodo social learning network

2.3.1 The procedure of designing a lecture as per model of blended learning

(1) Do research on the lesson

(2) Prepare the foundation of information technology and communication (Edmodo social learning network and other tools)

(3) Prepare lesson plan

(4) Give out lesson requests, documents, instructions for the students to access the Edmodo social learning network before going to class

(5) The students have time to carry out their duties before going to class (carry out the tasks 1), assuring the timing as per the request of Edmodo (with the marks of multi-choice questions in Quiz), students – students, students – lecturers might exchange on the ideas of forming the reports or the unclear issues in the progress of carrying out duties.

(6) The lecturers mark the part of constructed response of the students on Edmodo and generalize the marks obtained by the students before they go to class

(7) At the classroom (students carries out tasks 2): F2F

- The lecturer gives overview remarks on the progress, quality of the self study of the students
- The students represent the interesting points of view, the knowledge gained and the difficulties when carrying out duties
- The students or lecturers give out the important questions/affairs, or the outstanding issues…
- The lecturers organize for the students to exchange between students – students, lecturers – students
- The lecturer generalize and finalize the knowledge;

(8) The students carry out tasks 3: Use the perceived knowledge to deal with the applied assignments

(9) The students do the new exercises for the next lesson

2.3.2 Designing geography lesson as per the model of blended learning

The geography lesson under the model of blended learning with the assistance of Edmodo learning social network is designed into three parts as per the time order:

- The part of assign tasks to students for self study, self research before going to class (might assign tasks students as per group or individually)
- Deploy in class
- Develop, apply when finishing the lesson in class

Example 1: Lesson 1: the universe and solar system (1 period)

Example 2: Lesson 5: Africa, America, Europe (1 period)

2.3.3 Organizing the geography study for students as per model of blended learning

2.3.3.1 Organizing the learning activities before going to class

- The lecturers give the lesson outline, the references and the duties for students on Edmodo
- Students learn about the duties
- The students are requested to interact with the lecturer or other students in the progress of carrying out duties
- Students are requested to put on Edmodo the issues for exchange and discussion in class hours with the presence of the lecturer before the starting of the class hours
- Edmodo marks the multi-choice questions, the lecturer marks the constructed response tests completed timely by the students before they go to class

2.3.3.2 Organizing the class hour learning activities

- The lecturer gives out the specialized issues that need the answers in class hours
- Announce the marks for the tasks carried out by the students before they go to class
- Announce the issues that the students wish to discuss in class hours, assign the issues for the respective groups to find out the answers with the report on the operation results of the group
- Turn in turn, each group represents the group work results
- Other groups listen, take notes and make questions
- Each group gives answers to the questions from other groups
- The lecturer make any supplementation (if any), finalize the knowledge and assess the quality of the representation of each group.
- Assign application tasks at the end of the lesson

CONCLUSION OF CHAPTER 2

- Do research on the theoretical basis of the application of information technology and communication in renovating the teaching methods as per the proactive orientation

- Do research on the use of model of blended learning into teaching geography to improve the study quality of the students
- Do research on forming the study social network serving the geography teaching by Edmodo social learning network.
- Construct some geography lessons by model of blended learning with the assistance of Edmodo social learning network
- Construct the steps of organizing the geography study activities for students as per the model of blended learning with the assistance of Edmodo social learning network

CHAPTER 3: PEDAGOGIC EXPERIMENT

3.1. The purpose and tasks, empirical principles

3.1.1. The purpose of the experiment

- Verify the theoretical studies on the design and organization of Geography lessons in teaching modules of Nature - Society under Blended learning approach with the teaching technological perspective of learner to be center (LEARER-CENTERED)

- The results of pedagogical experiment will demonstrate practical value, objectivity and scientific research results of the theory that the subject has already been established.

3.1.2. Experimental tasks

No	Experimental tasks
1	Established scientific theories relating to the application of IT in teaching geography for Pupils of Primary Education towards ability development through combining teaching model.
2	Organizations Experimental tasks in 2 class Primary Education K20 No1 and Primary Education K21 No3
3	Analysis and evaluation of experimental results and make necessary conclusions and recommendations

3.1.3. Experimental Principle

The teaching activities are selected and designed and organized suitable with geography lesson content and have a positive impact on learners according to the approach of learning model of combined technologies towards ability development.

Design *Experimental* lessons and controlled experiments to strengthen, expand knowledge of lessons in training program.

Experimental class and the control class follows below conditions:

No.	Characteristics of Experimental class and the control class
1	Students have equivalent qualifications and learning awareness
2	Students are almost similar.
3	Space and learning conditions are similar
4	Taught by the same teacher
5	The experimental results are evaluated objectively, Scientifically with the knowledge test and psychological questionnaires for students

3.2. Experimental content

3.2.1. The experimental lessons

Lesson 2: The shape, size and structure of the Earth and the consequences (1 session)

Lesson 6: Asia, Oceania, Antarctica (1 session)

3.2.2. Test, evaluate the effectiveness of the design and organization lessons modeled as combine learning (blended learning)

3.2.2.1. Surveys of teachers and students on social network site Edmodo supporting the learning of geography lesson

3.2.2.2. *Test, evaluate the effectiveness of the design and organization lessons modeled as combine learning (blended learning) with the support of the social networking site Edmodo*

3.3. Experimental Methods

Teachers, students evaluate the structure, content and format of Edmodo model through sent questionnaires.

Conducting drafted the specific content and process organization according to each lesson of Geography following combined learning model. Then, supply of materials for experimental students.

Author directly held classes teaching of experimental and control.

Meeting and talking with students after the end of each lesson to assess the relevance of the content and learning activities in the model of combined learning.

Evaluating the results of the organization of geography lessons in the model combined learning through observing the products that students make and through the questionnaire after the end of the teaching activities.

3.4. Experimental Organization

3.4.1. Object, time, experimental processes

3.4.1.1. Experimental object

Under the practical conditions the author chosed 4 classes: 2 experimental classes and 2 control classes according to the criteria above.

3.4.1.2. Experimental time

According to the curriculum, modules nature - society, children physiology is taught in the second semester, freshman year. The trial time was conducted from late 12/2014

3.4.1.3. Pedagogical Experimental procedure

The experiment was conducted in parallel between the experimental class and the control class. Investigating about the awareness of students of the geography, their use of computers in learning and self-study habits before class through surveys and direct interview. Designing Geography lessons content in teaching for Primary Pupils as combining learning model with the main tools is the application of social learning network Edmodo.

Conducting the experiment. Checking the awareness of students after the experiment by evaluation forms. Conducting the evaluation of experimental results.

3.4.2. Experimental organizations to verify hypothesis

3.4.2.1. Methodology

The experimental steps	**content**
Step 1: Designation of Experimental lessons	- Survey of input factors: Subject is Pupils (qualifications and knowledge of pupils). - Setting the scientific hypothesis - Defining objectives, establishing goals (A lesson for primary grade, one lesson for the control class).
Step 2: Conducting Experiments of lessons	- Organization to implement the lessons to pupils - Conduct organizational learning activities combining with observations, notes to provide a basis for comparison, analysis and evaluation of the results.
Step 3: Assessment of results to confirm the hypothesis	- Analysis of the results achieved. - Treating the experimental results to classify students. Comparing the results of experimental class and control class to draw the feasibility of topics.
The processing steps of experimental results:	- Conducting scoring for students in the both classes according to a scale of 10 points. - Statistics results after grading. - Calculate the average grades of both classes.

	- Grouped under the hierarchy resulting from weak to good to compare, and draw conclusions: Weak types: under 5 points; Average: from 5 to 6 points; Type distinction from 7 to 8 points; With excellence from 9 to 10 points.
Compare scientific theories with the initial goal to draw the necessary assessment. Teachers organize implementation of lessons to students which have designed for 2 groups and directly taught by the author.	

3.4.2.2. Experiment

Lesson 2: The shape, size and structure of the Earth and the consequences (1 session)

Lesson 5: Asia, Oceania, Antarctica (1 session)

3.4.2.3. Conducting experiments

- Construction Profile of pupils in the experimental and the control class
- Proceeding as experimental design
- Test pupils' knowledge through quiz test, checking skills, attitudes through the surveys conducted after the experiment.
- Survey by questionnaire about the structure, content and form of social learning network Edmodo.

3.5. Experimental results

3.5.1. The experimental results through the feedback of students

3.5.2. The experimental results through proving the hypothesis

On the basis of analyzing and comparing the results obtained in the experimental class and the control class, we had sufficient evidence to draw important conclusions which are: *Efficiency of Geography lessons according to Blended learning approach with the support of Edmodo social learning network will have a higher efficiency than lessons designed and organized in view of taking teacher-centered or use of IT at the simple level.*

3.6. Reviews, comments of experimental results

1. Using the blended learning model with the great help of Edmodo social learning network to teach geography to students of Primary Education sector has brought high efficiency

2. Effectiveness of Geography lesson in the model of blended learning with the support of Edmodo social learning network will have a higher efficiency than lessons designed and organized in view of taking teacher-centered.

CONCLUSION OF CHAPTER 3

1. Pedagogical experimental important purpose of this project is to prove effectiveness and feasibility of IT application in Geography teaching in the model of blended learning which the thesis established and changed. Pedagogic practice of the topic focuses on the application of the model which has been established in the Chapter 2 for students of PED K20 and PED K21, Department of Primary Education, University of Hanoi through the geography of modules Natural – Society base.

2. On the basis of defined goals, tasks and principles of pedagogical experiment, experiments of the topic was conducted on students of 2 grades to test thoroughly posed scientific hypothesis.

3. Pedagogic practice identified purposes, scientific theories, experimental methods, methods of evaluating the results of empirical quantitative and qualitative; evaluate the capacity development of students through grades and academic activities of the students.

CONCLUSION AND RECOMMENDATIONS

1. Conclusion

First: Blended learning is a model of effective teaching and learning, based on the use of ICT to connect the advantages of traditional teaching with online learning. This model has brought high efficiency in line with the trend of innovation in education today and especially with a positive effect on teaching geography.

Second: Geography teaching in the teacher training program in Vietnam Primary are now fully compatible with the blended learning model learning with the support of Edmodo social learning network.

Third: Construction and use of the website system, social learning network, Webquest ... in teaching geography has become an inevitable trend. That, perfectly suited to the characteristics and capabilities of faculty and students of the University - College of Vietnam today.

Fourth: Design and organization process of Geography lessons in training program of primary teachers in model of combined study is designed in view of teaching technology; perspective of taking student-centered teaching; perspective of learners' Capacity development with the support of online learning tool which is Edmodo social learning network; is divided into phases; In which the design phase of teaching-learning tools; goal Design; Determination of the input conditions; Detailed activity design; And demonstration of the design are critical phases.

Fifth: It is necessary to establish environment of blended learning, process of design and organization of Geography lessons for students in order to bring the most effectiveness.

2. Recommendations

2.1. For schools, Primary teacher training faculties

- Need to create mechanisms in the management and implementation of training and orientation of IT application in general teaching, teaching geography in particular a legal corridor for teachers to comply with the approved programs.

- Care for, create the necessary conditions for the adoption of the organizational model of blended learning.

2.2. For trainers

- When apply IT on geography teaching for students with blended learning model they need to build lessons in accordance with the structure, process model, and consider the creation of institutions and necessary and

sufficient conditions for the organization of learning activities for students.

- There are specific, essential measures to improve self-learning, self-study of students, on the other hand strengthen multidimensional interaction between teachers-students, students - students during the learning process.

- Determine the competencies required for the formation and development of students through blended learning model with the appropriate quantity and the level to ensure feasibility.

- To achieve objectives, the need to research, design, dynamic way of teaching in the learning phases which were sensibly combined, create and maintain learning environments anytime anywhere in order to improve the quality of learning, build capacity for students.

2.3. For students

- Learning in a blended learning model, students must have the ability to self-learn, self-study, a positive spirit, voluntary initiative in their studies.

- In the process of learning in blended learning model with the help of ICT, students must have scientific reasoning skills, develop concise logical report, and have a valid opinion on the problem which is raised by teachers and other students. Through which, students will become more complete their own abilities in a positive direction.