



APPLYING MICRO – TEACHING AND JUGYOU KENKYUU (LESSON STUDY) TO ENHANCE STUDENTS’ TEACHING SKILLS THROUGH THE MODULE OF GEOPGRAPHY TEACHING METHODOLOGY AT HIGH SCHOOL*

*Ha Van Thang**

Department of Geography - Ho Chi Minh City University of Education

Received: 02/01/2018; Revised: 22/01/2018; Accepted: 21/5/2018

ABSTRACT

This article provides some basic theoretical statements about micro-teaching and lesson study, and suggests how to combine these methods to develop the teaching skills of students in a High School Geography Teaching Methodology module in a Department of Geography. After trailing this combination, the author analyzed data from the trial to assess the feasibility of applying these two methods to teacher training programmes.

Keywords: lesson study, micro teaching method, pedagogical, teaching skills.

TÓM TẮT

Vận dụng phương pháp vi mô và nghiên cứu bài học để nâng cao kỹ năng dạy học cho sinh viên thông qua học phần phương pháp giảng dạy Địa lí ở trường phổ thông

Bài viết cung cấp một số lý thuyết cơ bản về Dạy học vi mô và Nghiên cứu bài học; đồng thời, gợi ý cách kết hợp các phương pháp này để phát triển kỹ năng giảng dạy cho sinh viên sư phạm trong học phần Phương pháp giảng dạy Địa lí ở một trường phổ thông. Sau khi thực nghiệm tác giả đã phân tích dữ liệu để đánh giá tính khả thi của việc áp dụng hai phương pháp nêu trên cho chương trình đào tạo giáo viên của khoa địa lí.

Từ khóa: nghiên cứu bài học, phương pháp vi mô, sư phạm, kỹ năng dạy học.

1. Introduction

Developing pedagogical abilities and teaching skills are key tasks in the training process at universities of education. Teaching skills need to be developed with students on a regular basis and focus on the teaching method modules. In fact, there are many specific methods to develop teaching skills, one of which is Micro teaching, which has been shown to have many benefits for student teachers. When micro teaching is combined with Lesson study, it has the potential to create an improvement in the innovation of teaching method based on learning from experience.

* This research was presented at the conference "Exploring pedagogies for Professional Learning across International Contexts"

* Email: hathangsptphcm@gmail.com

In this study, the author combines micro teaching and classroom observation method in the lesson study to organize students practicing teaching skills. Specifically, some students practice teaching skills such as using question skill, explanatory skill, etc. through micro-lessons. These lessons then are analyzed and repeated several times to test the improvement. Simultaneously, the classroom observation method in the lesson study is applied by other student groups to supplement the micro teaching. The result of the combination is comprehensive assessments about students' teaching skills and suggestions for them to following develop.

2. Contents

2.1. *Micro teaching method*

Tran Thi Thanh Thuy - PhD at Ha Noi National University of Education based the definitions developed by D.W. Allen (1966), R.N. Bush (1968), M. Bruce (1970), U. Mc Aleese (1971), J.C. Clif et al. (1976)... Her work proposed the following conception of micro teaching method: *Micro teaching is a specific method for training teachers, in which each pedagogical student practices several teaching skills through a short micro-lesson in a small group.* (Thuy, 2013, p.28)

Characteristics of micro teaching method: (Thuy, 2013, p.32)

- It is a specific method for training teachers.
- Students practice in the simplified training environment.
- Students' practice is based on the simulations of real classes.
- Comments are given as soon as the micro lessons end.
- Video is used for recording and playback purposes.
- A closely monitored practice environment.
- The individual practicing requirements for each student.

The components of the micro teaching method include:

- Student: A student plays the role of a teacher who practices the micro lesson.
- Students: Five to ten students play the role of real high school students.
- Micro Lesson Plan: A lesson plan for micro lesson lasting from 5 to 15 minutes.
- Teaching skills: One or a group of practiced teaching skills.
- Instructor: A hands-on instructor.
- Observation form: An observation note for micro lesson.
- Observation Team: A group of observers from 10 to 20 students.
- Clips: Video recordings of micro lessons.
- Comments: comments of observers (lecturer and students).

2.2. Lesson study

Lesson study is a model of observation that is based on professional discussion activities developed by Japanese educational experts and teachers. In Vietnam, academic discussion activities in high schools have been improved pursuing this approach in recent years. With Lesson study, teachers learn from the actual learning of students. Indeed, teachers design lesson plans, practice in classes, observe, reflect and share together (based on students learning). Teachers then discuss the impact of presentation, questions, and how learning tasks affect students' learning. As a result, teachers collaborate and learn from each other's experience in order to effectively adjust daily teaching methods. (Stigler & Hiebert, 2012, p.134, 135)

There are 8 steps to complete the Lesson study cycle: 1 / Choose the focus of the lesson, 2 / design a lesson plan, 3 / Teach the class, 4 / Evaluate the lesson and its effect, 5/ Improve the lesson lecture, 6 / Re-teach the class, 7 / Evaluate and reflect again, 8 / Share the achievement. (Stigler & Hiebert, 2012, p.137, 141)

This study applied Lesson study through the guides of observation lessons to develop the students' teaching skills. The table below illustrates some suggestions for observing, evaluating, and sharing lessons.

Table 1. Observation classes form following lesson study

<p>When observing classes, teachers should: (HCMC, 2015, p.1,2,3)</p> <p>1. Focus on students' learning to answer the following suggested questions:</p> <ul style="list-style-type: none"> + How are students' behaviors and expressions? (excited, active, depressed, sluggish ...) + Can students follow academic tasks? Do students understand the teacher's instructions? + How are interactions between students in the classroom? + What do activities attract all students? Why? + How do teacher attract students to participate? + Who do not participate / have not participated in learning activities? <p>2. Pay attention to both positive students and students who are not active.</p> <p>3. Teacher's observation when students work independently or in group activities.</p> <ul style="list-style-type: none"> + When students work in groups: Is there enough time for students to carry out their tasks, understand the contents of the lesson? + How many students are involved in each task? + Who is not involved in each task? Why? In that case, what can we do for all

students to participate meaningfully?

When discussing, the teacher shares:

1. What they learned from their colleague's lesson.
2. What difficulties students face in classes.
3. Descriptions of the students' behaviors and expressions.
4. Causes of difficulties students faced in classes.
5. Solutions to overcome students' difficulties in classes.
6. What is new innovation compared to textbooks and teacher books and how it is demonstrated by students' achievement.
7. The relevant content and learning activities for students' abilities.
8. How students support.
9. How students connect known knowledge to new knowledge.
10. Students' opportunities to help each other in their studies.

Discussion method:

I recognize the student... the moment... like that... that indicates... The reason of that is ... so we can do this...

I learned something from this students' learning situation... because ...

2.3. *Teaching skills*

“Teaching skills are the teachers’ abilities applying their knowledge and skills creatively to organize learning activities to students achieve learning goals” (Thuy, 2013, p.24)

The teaching skills through the teaching process include: 1 / Planning the lesson: target setting, selecting contents and teaching methods, choosing teaching aids, designing teaching activities, examination and evaluation tasks. 2 / Performing the lesson plans: language skills, organizing activities for student groups, using questions, explaining skills, using teaching aids, applying ICT and communication, integrating educational content in teaching, classroom management, checking and evaluating, etc. (Thuy, 2013, p.26)

2.4. *Applying micro –teaching and lesson study to enhance students’ teaching skills through the module of high school geography teaching methodology*

2.4.1. *The goals*

*** Knowledge:**

- Students can understand the theoretical knowledge of teaching skills and basic steps to practice them.

- Students can understand basic knowledge of micro teaching method and lesson study through simplified operations.

*** Skills:**

- Students competently have basic teaching skills.
- Students or groups of students can apply micro teaching method and lesson study to practice regularly themselves.

2.4.2. The conditions of applying process

Below are the standard conditions for applying micro teaching method and lesson study in developing teaching skills for pedagogical students. They are compared to the actual teaching conditions in the module of Geography Teaching Methodology module at high schools.

Table 2. Comparing the standard conditions to practical conditions when applying micro-teaching and lesson study

Conditions	Necessary conditions	Practical conditions	Adjustments
Students abilities	<ul style="list-style-type: none"> - Students have good basic geography knowledge. - Students have theoretical knowledge of teaching skills. 	<ul style="list-style-type: none"> - Students' professional knowledge requires improvement - Teaching skills of students have not been competently - Students do not have micro-teaching and lesson study knowledge 	<ul style="list-style-type: none"> - Teachers review geographic knowledge in high school through a system of exercises - Students themselves study materials on teaching skills, micro-teaching method and lesson study
Lecturers	<ul style="list-style-type: none"> - Teachers can professionally apply the process of micro teaching and lesson study in the training of pedagogical skills for students. - Teachers are proficient with teaching skills - Teachers know how to give positive comments, as well as instruct students to 	<ul style="list-style-type: none"> - Teachers generally meet the requirements in standard conditions 	<ul style="list-style-type: none"> - Teachers apply the modeling approach. In detail, teachers practice the teaching techniques, then organizing students to analyze in order to outline the key points before the students practise.

	give their feedback after each micro activities.	
Teaching facilities	<ul style="list-style-type: none"> - Specialized classrooms include requirements below: - There are 10 to 12 sets of tables and chairs for from 20 to 25 students - 01 black board - Machinery equipment: computers, Internet connection, projectors, digital camera, geography teaching facilities... 	<ul style="list-style-type: none"> - There are no professional classrooms, teachers use normal classrooms with large numbers of students - Equipment: No camera, computer without internet - Dividing the classroom into specific groups: high school student groups, observation groups in the direction of lesson study (student observation), comment student group - Using personal video camera, camera phone...

2.4.3. *The step-by-step process of combining micro teaching method and lesson study*

The process of combining micro teaching method and lesson study is described generally as:

Teachers divide their class into 4 groups of students with specific tasks and illustrate how to work for each group:

- Practising Students: Students practise teaching skills.
- Students group 1: Students observe practising students following lesson study.
- Students group 2: Students observe practising students to give feedback.
- Students group 3: Students play the role of high school students.

Teachers then provide basic knowledge about micro teaching method and lesson study, while modeling specific teaching skills. Then students analyze the teacher's micro lecture through the questions which are provided by the teacher previously.

After this step, students design micro-lesson plans related to a specific teaching skill. This assignment applies to all students in the class.

Next, the practising students apply the micro lesson plans. This process needs to be carefully recorded. The videos will be replayed immediately for the whole class to observe, and other groups of students give feedback on the assigned tasks. Practising students will amend the lesson plans for the next time after reviewing their presentations and receiving comments.

The second practice is similarly applied. The comments focus on improving weak points identified in the previous practice.

Finally, students receive the directions for further training in teaching skills from teachers and groups.

Figure 1 and Table 3 below specifically explain the process of using a combined micro teaching method and lesson study for a specific teaching skill - making question skills in the module of Geography teaching method at high school.

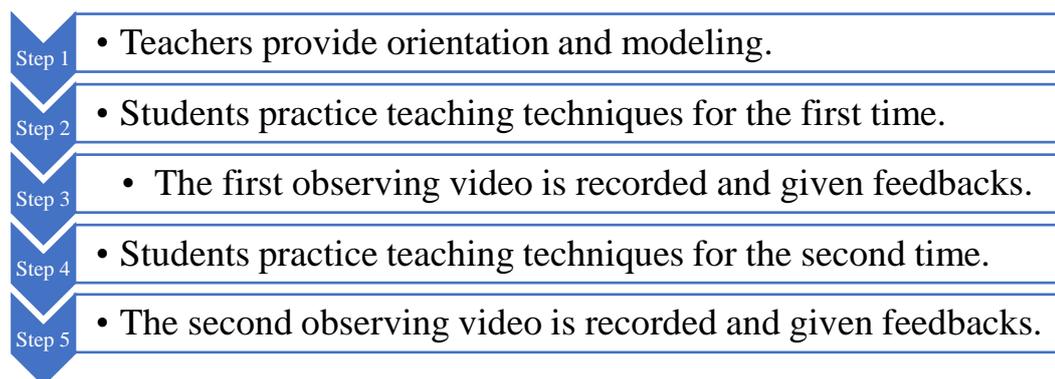


Figure 1. The process of applying micro-teaching and lesson study in the teaching techniques

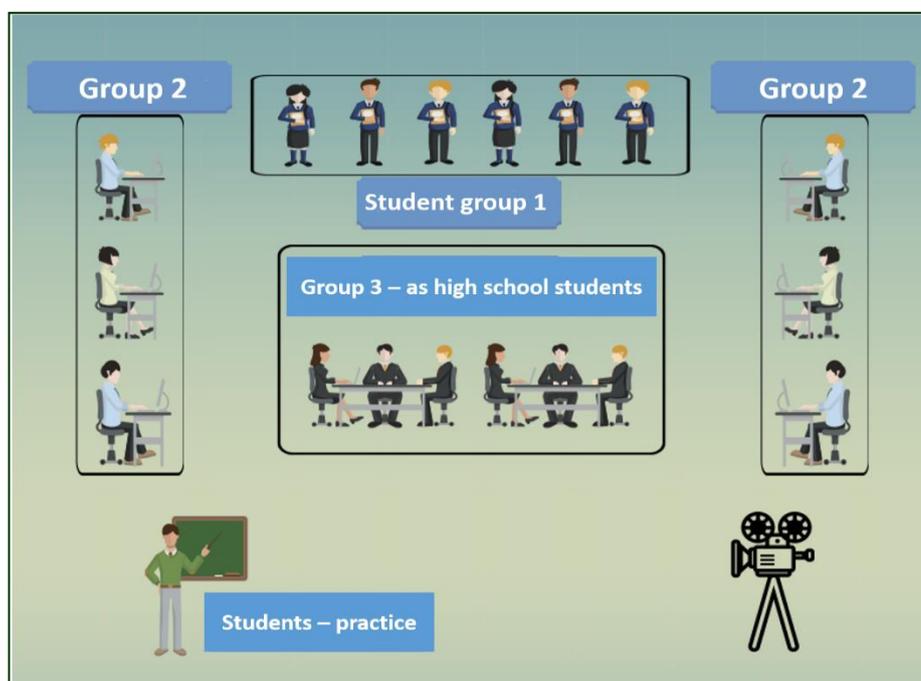


Figure 2. Classroom space

Table 3. *Process of applying micro-teaching and lesson study in the teaching techniques (in detail)*

Steps	Lecturer	Students			Outcomes	
		Practicing Students	Group 1	Group 2		Group 3
First	<ul style="list-style-type: none"> - Teachers provide basic knowledge on micro teaching method and lesson study. - Modeling the skill of making questions. 	Students observe how teacher models the technique of making questions through the question-oriented system.				<ul style="list-style-type: none"> - Actualized making Questions techniques. - Questionnaire
Second	<ul style="list-style-type: none"> - Choosing the students to practice technique (2 - 3 students). - Providing requirements and orientation for students. 	<ul style="list-style-type: none"> - Designing questionnaires based on the self-selected lesson. - Group working to Edit and complete the questionnaire. - Practicing the question using technique. 	<ul style="list-style-type: none"> - Designing questionnaires based on the self-selected lesson. - Receiving directions on observation following lesson study. - Observing, taking notes. 	<ul style="list-style-type: none"> - Designing questionnaires based on the self-selected lesson. - Receiving directions on observation following teacher's requirement. - Observing , taking notes 	<ul style="list-style-type: none"> - Designing questionnaires based on the self-selected lesson. - Attending class as high school students 	<ul style="list-style-type: none"> - Completing questionnaire - The videos about the technique of making questions of the groups of practicing students.
Third	<ul style="list-style-type: none"> - Presenting videos of practising student's technique. - Organizing student groups 2 and 3 to give comments. 	<ul style="list-style-type: none"> - Reviewing their own practice. - Taking notes and receiving other's suggestions. - Correcting and repairing 	<ul style="list-style-type: none"> - Giving feedback from observation on how students learn. 	<ul style="list-style-type: none"> - Giving feedbacks from observing how to practice students' application on technique of making questions based on 	<ul style="list-style-type: none"> - Giving Feedbacks from students taking part in lesson. 	<ul style="list-style-type: none"> - Notes of comments. - The completely revised questionnaire

				theory of this technique			
Fourth	- Organizing students to practice for the second time	- Continuing practicing with revised questionnaire. - Changing the application based on comments	Similar to the third step.	Similar to the third step.	Similar to the third step.	- The videos about the technique of making questions of the practicing students group at the second time.	
Fifth	- This step repeats the third step, however its process is shorter and focused on unchanged points of group 2's feedbacks. Self-directed technique of making questions is recommended on this basis.						

2.5. Experiment, results and discussions

In this section, we present the process of applying micro teaching and lesson study for a specific technique - i.e. *using questions as a teaching strategy*. The survey results, then are analyzed in order to assess the feasibility and effectiveness of the method applied

2.5.1. Experimental information

Module: Geography teaching methodology at high school

Teaching technique: using questions as a teaching strategy (tab 4 below shows in detail)

Students: Senior students (40 students, in which 10 students practise using question technique) in the Geography Department of Ho Chi Minh City University of Education

Process: This process is used in the same way as applying micro –teaching and lesson study to enhance students' teaching skills described in section 2.4.3.

Table 4. Some using question techniques and how to proceed

Specific technique	How to proceed
Stop after asking questions	- Using the waiting time (3 - 5 seconds) after asking the question - Requiring a student to give an answer immediately after the waiting time is finished
Activating all students	- The teacher prepares the questions and tells the students that they are going to answer the questions in turn - Teachers provide opportunities for both active and passive students to voice their opinions
Distributing the question to the whole class	- Teacher try to ask a lot of students and pay attention to the passive students or the students who sit at the back of the class - For complex questions, the teacher should organize the group

	<p>discussion</p> <ul style="list-style-type: none"> - The teacher based on the student's answer to ask following questions - For difficult questions should be given small hints
Focusing on lesson focus	<ul style="list-style-type: none"> - Teachers should prepare a questionnaire which focuses on the lesson focus.
Responding positively to students answer	<ul style="list-style-type: none"> - For the correct answers: to praise, recognize the answer. For example: nodding, saying “yes”, “very good”... - For students w answer questions: <ul style="list-style-type: none"> + Paraphrase the original questions or express them in more understandable terms + Explain the conceptual content in the questions + Use visual aids to clarify questions + Ask the students to review the documents + Ask other students - For the correct answers in part: Teachers need to assess the correct parts, then asking the other students to add comments to complete the answers. - For the wrong answers: <ul style="list-style-type: none"> + Teachers should acknowledge the student's comments + Creating a second opportunity for these students by using the other student's response to encourage the students to continue to think. + Suggesting other students to contribute ideas + Where the answer is incorrect and why, asking other questions to help students understand why the answer is not correct.
Explaining	<ul style="list-style-type: none"> - The teacher asks questions that ask students to give more information - The teacher asks students to explain more clearly their answers
Connecting	<ul style="list-style-type: none"> - Teacher asks students to connect their answers with the knowledge they have learned
Avoiding repeat your question	<ul style="list-style-type: none"> - Teacher prepares the questions carefully - Having a clear and concise way of asking - Applying the combination of small skills mentioned above.
Avoiding answer your own questions	<ul style="list-style-type: none"> - If some students do not understand the questions teachers will apply the above techniques or ask another student to repeat the questions.
Avoiding repeat students' questions	<ul style="list-style-type: none"> - To assess whether the student's answers are correct or not, teachers should suggest other students to comment their answers, finally teachers conclude.

2.5.2. Content of survey

What do you think about the application of micro teaching method and lesson study for asking questions as a teaching strategy in the module of Geography teaching method at high school? Students Chose one of the following levels of each sections (From 1 to 5 is from low to high). The survey was based on nine basic criteria:

1. Relevance of methods: the suitability of these methods with the elements of the teaching process.

2. Effectiveness of the methods: Feasibility and effectiveness of applying the methods into a specific teaching skill.

3. Relevance of teaching facilities: Assessing the support of teaching facilities for applying the methods.

4. Process of method applied scientifically: Evaluating the process of applying and improving micro teaching method and lesson study in the specific teaching conditions

5. Development of skills: Evaluating abilities of the methods to develop the teaching skills for students.

6.7.8. The attention of the students in the lessons; the interaction of students in the classroom; positive, exciting, fun classroom atmosphere.

9. Necessity of methods to develop pedagogical skills: Surveying students' requirement in practicing teaching skills with micro teaching method and lesson study.

2.5.3. The results of interview

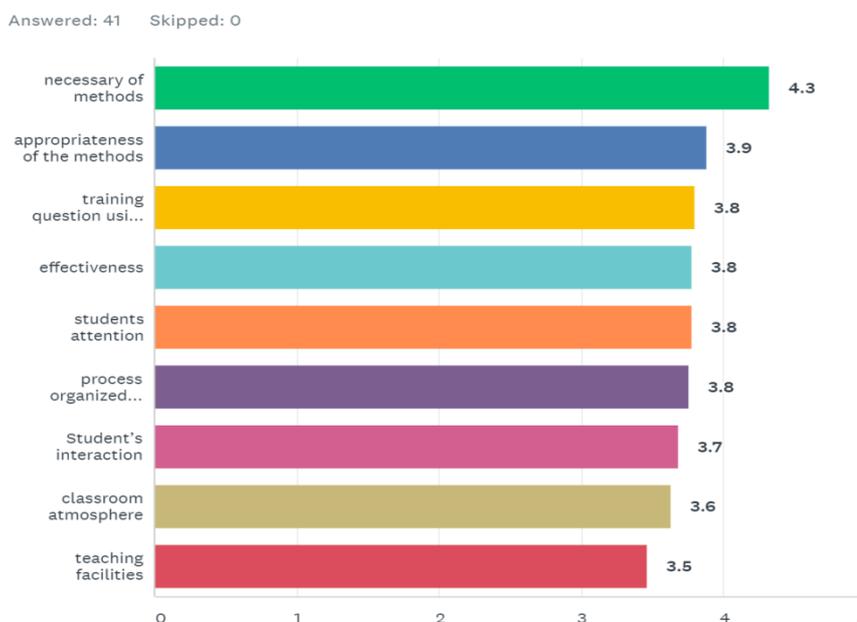


Figure 3. Chart showing assessing criteria for applying micro teaching and lesson study in using questions technique

In general, the achievement level of the criteria is good with the value around 4.0.

4.3 is the highest average result belonging to the criterion for the necessity of micro teaching method and lesson study to the using questions technique. This result indicates that students would benefit from learning how to ask questions using this particular method.

The lowest position is the suitability of the teaching environment criterion (3.5). This figure reflects the difficult fact to apply micro teaching method and lesson study in the training pedagogical students, especially the learning facilities.

The appropriateness of the methods criterion is 3.9. This data confirms that micro teaching method was perfectly suited to the practicing of the technique of making questions and pedagogical skills for students in general.

The effectiveness, the professional process, the attention of the students, and the ability to develop question using skill are quite positive results with the value of 3.8.

The criteria of Student's interaction level in the classroom and the classroom atmosphere are from 3.6 and 3.7.

In conclusion, the survey result provides a feasible assessment for applying micro teaching method and lesson study to train the technique of making question for pedagogical students.

3. Conclusions

1) Micro teaching and lesson study are suitable teaching methods for training teaching skills for pedagogical students. This approach contributes to improving the learning environment towards the goal of developing professional competencies for learners. 2) Students of Ho Chi Minh University of Education have demands on practicing pedagogical skills in positive learning environment. 3) Pedagogical universities should apply and improve the methods to adapt with the learning conditions.

❖ **Conflict of Interest:** Author have no conflict of interest to declare.

REFERENCES

- Department of Education and Training of Ho Chi Minh City (HCMC). (2015). *Guidance on how to observe the class and discuss following lesson study*. Ho Chi Minh.
- Ministry of Education and Training (MOET). Vietnam-Belgium Project. (2010). *Active Teaching and Learning - Some teaching methods and Techniques*. Ho Chi Minh: Publisher of Pedagogical University.
- James W. Stigler & James Hiebert. (2012). *Teaching gap (The teaching gap)*. Ho Chi Minh: Youth Publishing House.
- Tran Thi Thanh Thuy. (2013). *Training teaching skills for geography students by micro-teaching methods*. PhD thesis in education. Ha Noi: Hanoi National University of Education.