

# THE CAPACITY OF MICROTEACHING LESSON STUDY IN PROMOTING TEACHING PRACTICE AND PEDAGOGICAL DEVELOPMENT

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## **Abstract**

The purposes of this research are to investigate the implementation of Microteaching lesson study in promoting teaching practice and pedagogical development of the pre-service teachers in English Education Study Program. Method used in this research was case study. This case study involved 9 students of English Education Study Program who take Microteaching class. Data of this research was taken from interview. The finding of this research revealed that microteaching lesson study allowed participative discussion about learning and teaching and opportunities for a collaborative approach in which both lecturer and student-teachers focused on the improvement of pedagogy and teaching practice. It is found that microteaching lesson study leads to the pedagogical development as well as collaborative opportunity to explore the complex system of classroom-oriented processes. Seeing teacher development in relation to an emergent holistic concept of pedagogic development implies a comprehensive dynamic vision of how teaching quality develops.

**Keywords:** microteaching lesson study, pre-service teachers, teaching practice and pedagogical development.

## **Abstrak**

*Tujuan penelitian ini untuk memahami penerapan Microteaching Lesson Study dalam meningkatkan kemampuan mengajar serta perkembangan pedagogik mahasiswa Program studi pendidikan bahasa Inggris. Penelitian ini menerapkan model studi kasus. Penelitian ini melibatkan 9 mahasiswa yang mengikuti mata kuliah microteaching. Data yang digunakan dalam penelitian adalah hasil dari wawancara. Temuan dari penelitian ini menunjukkan bahwa penerapan Microteaching Lesson Study membuka kesempatan bagi para calon guru tidak hanya mengasah kemampuan mengajar akan tetapi juga mengembangkan pemahaman mereka terhadap belajar dan proses pembelajaran baik itu seraca penerapan maupun melalui diskusi partisipatif dengan dosen pengampu mata kuliah untuk mengeksplorasi kompleksitas dan pemahaman yang menyeluruh terhadap proses pembelajaran.*

**Kata Kunci:** *microteaching lesson study, calon guru, praktik mengajar dan perkembangan pedagogik.*

## **INTRODUCTION**

Initial Teachers education is changing rapidly prerequisites qualified teachers who continuously develop their pedagogical knowledge. Teachers strive

to equip learners with a wide range of skills as well as knowledge; this hastens the need for the development of more competence-centered approaches to teaching, together with greater emphasis on learning outcomes.

The pedagogical development of pre-service teachers is one of key elements for these educational demands. They are considered the most significant change agent in this field. The dual role of pre-service teachers, as subjects and objects of change, makes the field of teaching a growing and challenging area and has obtained major attention during current decades.

So far, many efforts have been taken to improve the quality of in-service English teachers through various programs sponsored by government or educational institutions. However, few efforts are found dealing with pre-service teachers. In fact, to increase the quality of teachers, the efforts should be better started from pre-service teachers. Molina (2012) argues that teacher education is an area in need of reform if we want to increase the performance of students. Furthermore, Molina (2012) asserts that below average student performance is also a result of the lack of teacher preparation. From several factors influencing teacher preparation, Molina (2012) states that one important component is the quality of the courses required for completion of a teaching degree. One of those substantial courses is microteaching as a practicum course preparing English student teachers to engage in practice based experiences.

Combined with lesson study, microteaching results in microteaching lesson study, that is a combination of microteaching and lesson study in which the student teachers, following the cycles of lesson study, practise teaching in front of the small groups of their peers students. Microteaching lesson study is one various modification of lesson study and based on the principles of lesson study developed in Japan.

Some recent studies on microteaching lesson study (Molina, 2012; Wood and Cajkler, 2013) reveal that microteaching lesson study is effective to enhance student teachers' content knowledge and pedagogical knowledge. Unfortunately, among those studies none was conducted in English subject for English student teachers. Most studies were in the fields of mathematics or science.

Moreover, as each phase of microteaching lesson study follows those of lesson study that requires different knowledge and skills and as not all student teachers have experienced teaching, the implementation of microteaching lesson study for student teachers might bring about some constraints. To cope with such constraints, the student teachers need to be prepared in every phase of microteaching lesson study by raising their awareness in each phase. Therefore, this study aims at exploring the capacity of micro teaching lesson study to improve student teacher's teaching skill and their pedagogical development.

As microteaching lesson study is implemented in Indonesia, it is important to understand its capacity in improving pre-service teachers teaching skill and pedagogical development to provide clear information on the implementation of this approach for mentors in university level, for institution, for students and for schools. Since lesson study in Indonesia focuses of in service teacher professional development, the capacity of microteaching lesson study in improving student-teacher teaching skill and pedagogical development has not been investigated.

The research supporting the potential of microteaching lesson study as an approach for improving mathematics teacher knowledge, particularly for secondary school teachers, was clear (Fernandez, 2011), but little was known about the potential of MLS in improving English pre-service teachers teaching skill and pedagogical development in Initial Teacher Education (ITE). This knowledge gap requires further study so that the researcher interested in implementing the process may be equipped with the appropriate knowledge to guide their students through MLS experience that leads to growth in prospective English teacher teaching skill and pedagogical knowledge development.

The purpose of the present study is to explore the capacity of MLS in improving student-teacher teaching skill and pedagogical development in teaching English subject. Additionally, this research will explore the implementation of MLS on student-teacher of English subject at English Education Study Program of IKIP-PGRI Pontianak in the academic year of 2015 – 2016. The following questions will guide this research: (1) In what way Microteaching lesson study

improves pre-service teachers' teaching skill?; and (2) How does Microteaching lesson study contribute to pre-service teachers' pedagogical development?

## **METHOD**

The design of this research is case study in order to capture an in-depth description of a phenomenon, and in this case, an instance of Microteaching lesson study. By definition, a case study is a specific instance that is frequently designed to illustrate a more general principle (Cohen, Manion, and Morrison, 2000: 181). As stated by Ary, Jacobs, Sorensen, and Razavieh (2006: 454) that the focus of a case study is on a single unit to produce an in-depth description that is rich and holistic. The 'unit' they mean includes an individual, a group, a site, a class, a policy, a programme, a process, an institution, or a community. Microteaching lesson study, about which this study is, can be viewed as a programme. In regard to the purpose of describing the 'unit', this study accords with one of three case study purposes: to produce detailed descriptions of a phenomenon, to develop possible explanations of it, or to evaluate the phenomenon (Gall, Gall, and Borg, 2003: 439). Due to those theoretical bases, case study suits the subject and objectives of the study.

The subjects of this study are the 6<sup>th</sup> semester students of English Education study programme that take microteaching subject. This specification of the subject implies that this study adopts criterion sampling. Ary *et al.* (2006: 431) clearly suggest using criterion sampling when a researcher sets the criterion and includes all cases or individuals that match the criterion.

This study employed interview, observations, and documentation as techniques for collecting data. Many literatures suggest those three techniques when conducting a qualitative study. For instance, Ary *et al.* (2006: 431) and Darlington and Scott (2002: 2) list the three techniques. In regard to this study, the three techniques that will be used interview, observation and documentation.

Interview is intended to collect the primary data taken from the students who enroll in Microteaching class. Interview is claimed by Ary *et al.* (2006: 438) to be one of the most widely used and basic techniques for obtaining qualitative

data from people about opinions, beliefs, and feelings about situations in their own words. Interview is also used to help understand the experiences people have and the meaning they make of them rather than to test hypotheses. Not only may interview provide information that cannot be obtained through observation, but can be used to verify observations as well.

In this study, data taken from observation employed for secondary data. The observation is conducted during the implementation of Microteaching lesson study meetings in which the researcher acts as an observer participant (participatory observer) whose role, as Ary et al. (2006: 433) describe, is possibly to interact with the subject enough to establish rapport but do not really become involved in the behaviours and activities of the group observed. Qualitative observation is more likely to proceed without any prior hypotheses and relies on narrative or words to describe the setting, the behaviors, and the interactions (Ary et al., 2006: 431).

In this study, the documents of Microteaching lesson study programmes, schedule of meeting, list of participants, photos, and other corresponding ones served as secondary data. According to Ary et al. (2006: 442), written documents or other artefacts may be used in qualitative research to gain an understanding of the phenomenon under study. Ary et al. refer the term documents to a wide range of written, physical, and visual materials, including what may term artefacts.

Validity does not limit to research findings, but also applies to data that a researcher collects, such as data from interview (Yin, 2011: 78). To validate the data, this study adopted three of techniques of validating data from Gall, Gall, and Borg (2003: 462-465): triangulation, member checking, and external audit.

Data analysis of qualitative data is complex and non-linear. Ary et al. (2006: 481) call it the most complex for it is a time-consuming and difficult process resulted from massive amounts of field notes, interview transcripts, audio recordings, video data, reflections, or information from documents, all of which must be examined and interpreted. Consequently, analysis involves reducing and organizing the data, synthesizing, searching for significant patterns, and discovering what is important. This study adopted data analysis model developed

by Ary et al. (2006: 481-491) which covers three stages: (a) familiarizing and organizing, (b) coding and reducing, and (3) interpreting and representing.

## **FINDINGS AND DISCUSSION**

Findings reported here are interpreted from the transcripts of the 9 pre-service teachers. Several themes emerged from student-teacher interviews, following comparative content analysis by the researcher (see table 1).

**Table 1. Themes from Analysis of Post-lesson Study Interviews**

<b>No</b>	<b>Themes</b>	<b>% of idea units</b>
1	Impact of practice and teacher learning	27.1
2	Teaching Approaches (pedagogy)	23.8
3	Student participation and progress in lessons	17.9
4	Student-focused observation	16.8
5	Collaboration	19.3
6	Potential of LS	8.4
7	Summative evaluation of LS	6.2

Discussion focused on the impact on student-teachers' learning and their practice. In relation to this, pedagogy featured very strongly (themes 1 and 2). The observation of student learning and their responses (participation) were important themes (3 and 4), with focus on learning very strong although often somewhat vaguely expressed. This related to the function into pedagogic practices that lesson study might fulfil. In an effort to understand further the development of student-teachers through lesson study, the researcher discusses findings under the following three headings: (a) Integration into their subject teaching roles; (b) Learning about students and (3) Impact on pedagogy.

### **Integration into Teaching Roles**

It is found that that the mentor began with preconceived ideas about what should happen but in the other cases student-teachers felt that the approach was open and consultative in an attempt to work together to identify learner challenges and varying degrees of learner-responsive teaching. When engaging in discussion

with lecturer about pedagogy, however, there was nervousness and initial contributions from trainees were described as tentative e.g. by AM, in his first cycle of lesson study:

“I think looking back I wasn’t very confident with maybe making a suggestion because I didn’t feel like a professional” (AM).

In his teaching practice, a second cycle was concluded allowing her to grow into her professional role with greater assurance than at the outset:

“I kind of felt a bit more confident that to make more suggestions on what I think would suit and especially in the reflection sessions, like after I’d observed HA [mentor] and how I could adapt it to my group” (AM).

This resulted in his assertion that by the end of her placement the process of lesson study had:

“Made it more clear what I have to do and you know about lesson structure and how to teach. .... And I even, I think J [mentor] said to me at the end of second cycle she noticed that I was more confident in myself, just contributing ideas and things like that...” (AM).

Other student (MK) felt similarly about her development and gradually increasing level of contribution to the exchange of ideas while working in a lesson study triad:

“And he had some really, really good ideas that P [mentor] used in the first one – and at first I was a bit like oh well I don’t know if I can say maybe we shouldn’t do it like that but then the second time that we did it when I – it was just me and no it was all three of us that planned it after P had done his – I was much more willing to say well no maybe we should do it like this because this didn’t work very well without feeling like I was – being rude” (AM) .

Teaching a lesson that they had evaluated and re-planned following the lecturer’s teaching was seen as valuable by all participants:

“I felt more comfortable teaching a lesson that I’d already seen because we’d made improvements, .....it was quite a daunting experience thinking, “She’s already taught it first, then I’m teaching it”. But because

we'd worked on it quite a lot as well, discussing ideas and things like that I felt a bit more comfortable rather than going in with something completely new" (MK).

"I really enjoyed watching at first to see how it's done, and it was so much easier seeing it and then..." (AM).

This shared perspective arising from engagement in a collaborative enterprise was not characteristic of their other teaching practice, which did not include lesson study, as will be discussed further below. Collaborative planning was the principal benefit identified by the respondents, a feature largely absent from their other teaching practices which did not feature lesson study:

"..... at my first placement I didn't do any like collaborative planning or anything" (RD).

The fact that time was set aside and was in a sense protected was seen as particularly helpful and effective to the development of the trainee teachers:

"Well I'd probably just say allocating planning time having an experienced person was the thing that helped me most. So you had an hour where you would just sit down talk to him about a few lessons, a few things that you could do rather than five minutes here, five minutes there, things like that" (RD).

The issue of time arose in a number of responses and this was a constraint as only two schools managed two cycles of two lessons. While lesson study was deemed valuable, time management was a challenge:

"But the workload, because it's quite big, but at the end of it I learnt a lot from it so I felt it really worthwhile and beneficial. So... it's just the time consuming element, in the placement" (DT).

Time had to be planned carefully so that lesson study was integrated into the time allocations made over for the role of mentoring in our programme rather than becoming an 'add-on' to core activity. Mentors as willing collaborators and models in lesson study projects were acknowledged as keys to the entry of the student-teachers into successful pedagogic practices.

### **Learning about Students**

This was a major point of discussion, captured in themes 3 and 4. In particular, the opportunity to observe the lesson through the experiences of two or three learners proved to be a revealing experience, although not easy or straightforward as we discuss below. Most of the trainees felt that their thinking about learners and their learner awareness changed significantly:

“Because I almost felt like I was one of them because I was sitting in the class and I wasn’t focussing on the teacher and it does make you think like it’s a lesson and you’re meant to be learning something from it but...when you can see other people messing around you are drawn to it. You can see exactly what’s going through their minds. If someone is disruptive you see why everyone suddenly hasn’t got their eyes on the teacher”(DT).

The view from the front of the class was considered different:

“ In a classroom of 30 kids there is no way that a teacher is able to consistently track the engagement and attainment of every pupil in that lesson” (RD).

“... it’s interesting because you don’t notice it as a teacher – but if you’re just looking at three students and they don’t realise you’re watching them it’s brilliant – yeah I thought it was good” (MK).

Observations of individual students often resulted in revised judgements about their abilities and their expectations, with some references to students exceeding expectations, in one case confirmed when the trainee teacher interviewed one of the students that she had observed at work:

“Yeah, it was strange at first, but then it was useful to actually see if they were working throughout and then I interviewed them to see if they actually, how they thought they worked. So one of the boys, he was quite fiddly, like playing with his pen, but then when it came to the plenary and they had to come up to the board, he was the one who was putting his hand up and going up and giving all the answers” (AM).

Some observations led to changes in practice, for example with a view improving student participation in interactive activities in a modern language class:

“.... with my year nine class, like with that lad who was sort of on his own, it really made me think sort of wait a minute, it’s all about the learners and it made me really sort of adjust how I taught them in future and when I did do like a revised seating plan getting him more involved in things...”(DT).

However, two trainees were particularly challenged by what they should be observing and felt that they were somewhat at sea about what to note down, for example, the following person felt comfortable about observing teacher performance (teaching) but much less so when looking at learning:

“He was spot on with how he taught it. In terms of observing the students, I think the point was, what exactly am I meant to be observing?” (MK).

Two other student-teachers, however, found the opportunity for observation of a small number of learners both absorbing and enlightening. A geography lesson study team had the lesson filmed to assist the review of the lesson, which was fortunate given the absorbed way the trainee engaged in the observation.

“I was so engrossed in watching what the students were doing rather than thinking right now we should be moving onto this or – I honestly couldn’t tell you what went on in the first lesson – I just had no idea and then I had to go back obviously like watch it to like write my own lesson plan for it” (RD).

A modern linguist trainee felt that her Year 10 lesson study group was the one with which she was most confident and familiar by the end of the placement:

“I think it helped me understand more the pupils in that class as well. By the time I left I felt I knew that class the most out of all my classes” (DT).

In general terms, despite the difficulties and uncertainties about what to observe, there was a view that observing learners had affected thinking about teaching:

“It really made me think sort of wait a minute, it’s all about the learners and it made me really sort of adjust how I taught them in future and when I did do like a revised seating plan getting him more involved in things...”  
(MK).

### **Impact on Pedagogy**

Themes 1 and 2 encouraged researchers to conclude that lesson study had contributed to the development of learner-responsive teaching and growth in pedagogy, to be explored in the discussion. The collaboration in planning-teaching-evaluating was seen as valuable by all participants, with positive impacts on their learning how to teach and on the learning experiences of their students:

“When P taught it because I didn’t know what I was, what exactly I was meant to be looking for, it was all a bit new and I was still a bit confused. By the time we were doing the second cycle and we were doing the debriefing and I’d seen how the lesson had improved from the first one, you could see the benefit of it, how the students were more engaged, the types of activity... .. how we sort of altered the activity slightly, it had such a greater impact on their learning and they all seemed to, almost like they could write the answers out for themselves more so than before”  
(MK).

After the mentor lesson, the evaluation meeting was considered particularly valuable as it enabled the trainees to amend the observed lesson to suit his/her learners, having seen the lesson field-tested by the mentor. In one case, the inexperienced trainee claimed to enjoy greater success than her mentor:

“.....we realised that we could improve the lesson by changing the order of activities, which was good because, when it came to my lesson, it was clear that the students learnt the topic much better than in my co-tutor’s lesson” (RD).

Interviewees described quite detailed discussion of how lessons were amended to meet learner needs, following critical evaluation for example of an artefact produced for the first lesson:

“I mean we changed one thing which was quite a major thing, which was the resource that I’d made was actually completely useless actually in the lesson. So like, we both looked at it and thought it was a really good resource and then because he did it practically we thought actually it didn’t help him at all to what he did. And then when I did it, it was completely useful, so just from that point of view, the fact that it looked perfectly alright, he’d looked at it and thought yeah that’s a good resource and what we’ve planned, I’d looked at it and thought yeah I’m pretty happy with that..... I need to make sure they do this side even though, it just wasn’t relevant” (AK).

All interviewees expressed greater confidence about planning and about thinking about the learners rather than about the teaching events or resources that they might organise. Generally, they believed that the emphasis in their thinking had moved primarily towards learners and their learning rather than being focused on what they did as teachers.

Interviews with participants suggest that lesson study allowed participative discussion about learning and teaching and opportunities for a collaborative approach in which both lecturer and student-teachers were learners focused on the improvement of pedagogy, not just the training of the prospective teacher. Lecturer clearly led the process but all student-teachers felt involved.

Student-teacher perspectives suggest that through lesson study leads to the development of pedagogy in both cases. This was the principal achievement of lesson study in this case study, a collaborative opportunity to explore the complex system of classroom-oriented processes, leading to growth in participants’ pedagogy. Seeing teacher development in relation to an emergent holistic concept of ‘pedagogic literacy’ implies a comprehensive dynamic vision of how teaching quality develops.

Looking at teacher preparation from the perspective of pedagogic literacy and its growth potentially offers a counter-view to the prevailing culture in ITE which sees teaching as a set of discrete competences to be ticked off as trainees progress through their programmes. Pedagogic literacy includes teacher skills that

are general in nature, for example understanding of learning and learners; context-related skills such as knowledge of the school and departmental cultures and its working practices, team work and collaboration, as well as the specific but interdependent professional skills such as lesson-planning, use of questions and understanding of various teaching approaches.

The growth in pedagogy represents a continuum of teacher development composed of learning from a long and wide range of experiences, including critical reflection on one's own learning experiences in instructed settings, through to the acquisition of theoretical understanding in teacher education programmes and reflective practical teaching skills from school placements early in one's career. The process continues throughout a teaching life leading to ever greater understanding of teaching as a social phenomenon, of the recursive uneven nature of learning and the wide diversity of learners.

This is what is crucial to the preparation of teachers to meet the challenges a rapidly changing world and for the unexpected. For, this we need new teachers who have the tools to learn to teach (Hiebert et al. 2003), ready for the continually changing world and the unexpected demands that classrooms present. To help to promote such learner-responsive teaching, we are encouraged to believe that lesson study provides a vehicle for structured exploration of the pedagogy and all its complexities, appropriate for the initial development of pedagogic literacy and its continuing refinement towards a greater understanding of the processes involved.

Student-teachers in this study suggested that engagement in lesson study was an effective way to help them grow their pedagogy, not only their individual skills, knowledge and confidence but also their collaborative skills to enable them to participate actively and creatively in a community of teacher learners. For ITE, lesson study appears to be at its most effective when experienced and critically engaged mentors support the growth of student-teachers.

In most settings, trainees thought than more than one cycle of two lessons was unrealistic. In addition, there was apprehension about the observation of learning and how to identify learning, some trainees emphasising both the lack of

experience to do this and the limited preparation that we offered. Thirdly, there was nervousness when offering feedback about the learning that took place in the mentor's lesson, two trainees finding this quite challenging. Finally, while 16 cases began only 12 were concluded for a variety of reasons (time, mentor unavailability, timetabling issues and other organisational pressures).

## CONCLUSION

In conclusion, there are four main points that have to be considered in implementing lesson study including observation, Collaborative planning was particularly valued, There was evidence of feeling part of the pedagogic community of practice, but this was not overwhelmingly explicit in the interviews, but could be inferred and There were claims for growth of pedagogical literacy.

Lesson study revealed clear benefits with student-teachers more fully engaged in collaborative practice than has been experienced with the traditional model. Thus, lesson study provided support for student-teachers to learn how to learn to teach through collaboration with committed lecturer. However, use of lesson study in ITE is in its infancy and further studies are needed to assess its impact and evaluate the extent to which models like ours can provide an effective and feasible vehicle for student-teacher development.

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