



LESSON STUDY AN URGENT NEED FOR QUALITY TEACHING IN KNOWLEDGE SOCIETY

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Abstract

The information and communication technologies have created new conditions for the emergence of knowledge societies. In these knowledge societies education system plays a pivotal role for its development sustenance. Teacher education is an essential component of the educational system. Teachers are the torch bearers in creating social cohesion, national integration and a learning society. They not only disseminate knowledge but also create and generate new knowledge. In the 21st century, more emphasis is given on learning-oriented strategy for change and to focus on empowerment of teachers and self-sustaining change in school. Now, teacher quality is a core innovation issue of school education in many countries. The lesson study is an important process which is helpful for improving the teaching learning activities. Therefore there is an urgent need of Lesson study for quality teaching in this knowledge society. Lesson study is a professional development process that Japanese teachers engage in to systematically examine their practice. The goal of lesson study is to improve the effectiveness of the experiences that the teachers provide to their students. Focused and energized collaboration, insight into student learning, development of a strong lesson plan and facilitation of pedagogical research are the principles of Lesson study. Form a Team, Develop Learning Goals, Design the Lesson, Plan the Study, Teach and Observe, Analyze and Revise and document and disseminate are the steps involved in Lesson study. Teaching Improvement, development of Instructional Materials, Formation of Teaching Community and the Scholarly Inquiry for teaching and learning are the important outcomes of Lesson study.

Keywords: Lesson study, Quality teaching, Knowledge society.

1. Introduction:

The information and communication technologies have created new conditions for the emergence of knowledge societies. Knowledge societies are about capabilities to identify, produce, process, transform, disseminate and use information to build and apply knowledge for human development. A Knowledge Society is one that creates, shares, and uses knowledge for the prosperity and well-being of its people. A knowledge society is a formal association of people with similar interests, who try to make effective use of their combined knowledge about their areas of interest and in the process, contribute to this knowledge.

In these knowledge societies education system plays a pivotal role for its development sustenance. Teacher education is an essential component of the educational system. It is intimately connected with society and is conditioned by the culture and character of a nation. The constitutional goals, the directive principles of the state policy, the socio-economic problems and the growth of knowledge, the emerging expectations and the changes operating in education, etc. call for an appropriate response from a futuristic education system and provide the perspective within which teacher education programmes need to be viewed. Teachers should be empowered through inservice and preservice training. These empowered teachers lead communities and nations in their march towards better and higher quality of life. Teachers are the torch bearers in creating social cohesion, national integration and a learning society. They not only disseminate knowledge but also create and generate new knowledge.

2. Need of the study:

The increasing globalization, information and communication technologies and socio-economic development creates more challenges in life. Meeting these challenges quickly points to the crucial need to enhance new perspectives on educational leadership, policies, curriculum, contents and methods of teaching. The need to restructure teaching, both within and outside the school, is gaining increased attention among educational researchers, policy-makers, administrators, practitioners, parents and media. Therefore educational management in the recent past has heavily emphasized the importance of re-thinking education for more effective teaching, enhanced learning, higher student achievement, and civic and moral education. In the 21st century, more emphasis is given on learning-oriented strategy for change and to focus on

empowerment of teachers and self-sustaining change in school. Now, teacher quality is a core innovation issue of school education in many countries. The lesson study is an important process which is helpful for improving the teaching learning activities. Therefore there is an urgent need of Lesson study for quality teaching in this knowledge society.

3. Objectives of the study:

1. To understand the concept of Lesson study.
2. To recognize the principles of Lesson study
3. To know the steps involved in Lesson study.
4. To explain the process of Lesson study.
5. To realize the importance of Lesson study.

4. Lesson study for quality teaching in this knowledge society

4.1 The concept of Lesson study:

Lesson study is a simple idea. If you want to improve instruction, what could be more obvious than collaborating with fellow teachers to plan, observe, and reflect on lessons? (Lewis 2002)

The term Lesson study is derived from the Japanese word *jogyokenkyuu*. The term lesson study was coined by Makoto Yoshida. Lesson study can also be translated in reverse as 'research lesson' [coined by Catherine Lewis], which indicates the level of scrutiny applied to individual lessons.

According to Stigler and Hiebert (1999), lesson study is important for improving teaching and learning process and for building the professional development of teachers.

Lesson study is a form of classroom inquiry in which several teachers collaboratively plan, teach, observe, revise and share the results of a single class lesson.

Lesson study, a professional teacher development process incorporating collaborative lesson planning with thoughtful and purposeful observation and reflection on the lessons.

Lesson study is a professional development process that Japanese teachers engage in to systematically examine their practice. The goal of lesson study is to improve the effectiveness of the experiences that the teachers provide to their students.

Working on these study lessons involves planning, teaching, observing, and critiquing the lessons. To provide focus and direction to this work, the teachers select an overarching goal and related research question that they want to explore. This research question then serves to guide their work on all the study lessons.

While working on a study lesson, teachers jointly draw up a detailed plan for the lesson, which one of the teachers uses to teach the lesson in a real classroom (as other group members observe the lesson). The group then comes together to discuss their observations of the lesson. Often, the group revises the lesson, and another teacher implements it in a second classroom, while group members again look on. The group will come together again to discuss the observed instruction. Finally, the teachers produce a report of what their study lessons have taught them, particularly with respect to their research question.

4.2 Lesson Study Principles

1. Focused and energized collaboration:

The lesson study process brings together interested parties for focused discussions which range from broad pedagogical goals to specific wording of questions for the class. The group must think very intentionally about the objectives of the lesson and how success might be assessed.

2. Insight into student learning:

All stages of the lesson study process—from lesson planning to classroom observation to reflective analysis—focus intensely and powerfully on the student learning process: How will students attack this open-ended question? Will they connect these ideas? Are they motivated by this example?

3. Development of a strong lesson plan:

The lesson plan developed may or may not make a good “off-the-shelf” plan, since it was carefully tailored to these the students, but it should contain essential elements that one could model and adapt to future lesson plans. We should believe that by carefully orchestrating student work at home between classes and reducing the number of in-class, teacher-led examples, we are able to achieve a reasonable balance between problem solving and knowledge construction on one hand and coverage of material on the other hand. Finally, the lesson study process also made readily apparent the weaknesses of our lesson plan.

4. Facilitation of pedagogical research:

During lesson study we can use experimental research questions and design data collection efforts and use the classroom as a laboratory. Think about gathering information to help evaluate the success in meeting the objectives. The post-lesson reflection also produced observations of unanticipated developments that could be the subject of future, systematic study.

4.3 Steps involved in Lesson study:

In a lesson study, teachers carefully explore how student learning, thinking and behavior change as a result of the lesson. The practice of lesson study can lead to instructional improvement as teachers become more knowledgeable about how their students learn and think and how instruction affects student thinking. Lesson study involves following steps.

1. **Form a Team:** Teams are usually composed of 3-6 instructors.
2. **Develop Learning Goals:** Team members articulate what they would like students to know and be able to do as a result of the lesson.
3. **Design the Lesson:** The team designs a lesson to achieve the learning goals.
4. **Plan the Study:** The team decides how to observe and collect evidence of student learning.
5. **Teach and Observe:** One team member teaches the lesson while others observe and collect evidence of student learning.
6. **Analyze and Revise:** The team discusses the results and assesses student progress toward learning goals.
7. **Document and Disseminate:** The team documents the lesson study and shares their work with colleagues.

4.4 The process of Lesson study:

1. Form a Team

A lesson study group usually consists of several teachers who are interested in working together to improve their teaching and student learning. To ensure multiple perspectives, a lesson study group should involve three to six teachers. The composition of the team should be determined by instructors' interests and the focus of the lesson study. Typically, participants are from the same discipline and often teach the same course. But, interdisciplinary teams may be appropriate when instructors from several disciplines are interested in creating a common experience for students or when they share common learning goals in their classes.

2. Develop Learning Goals

The learning goal is the backbone of a lesson and provides the "reason" for teaching and observing it. Teams start by discussing important student learning goals—desired forms of student learning, thinking, engagement, and behavior. A lesson study typically focuses on a significant developmental learning goal that encompasses intellectual capacities, habits of mind, and qualities of character. But the lesson also addresses immediate academic or

disciplinary goals. For example, a biology lesson that focuses on developing students' scientific reasoning (a broad developmental goal) may also aim to develop students knowledge of meiosis and mitosis (a narrower lesson-specific goal). Teams also discuss subject matter—the concepts and topics—on which their lesson will be based. Many are drawn to topics that are particularly difficult for students to learn, or that are especially important in the course or their fields. To get the most out of the lesson study experience teams should focus their lesson on a broad, developmental goal and lesson-specific goals.

Teaching goals and learning goals are not the same thing. Learning goals specify student habits of mind, intellectual capacities, personal qualities—in essence what students will know, what they can do and what they will be like. Teaching goals focus on what teachers do (e.g., to explain specific content to students). The practice of lesson study involves a shift from teaching goals to learning goals—on what students learn from the lesson and how their thinking changes.

3. Design the Lesson

Lesson planning is by and large a self taught, private activity in higher education; teachers tend to “prepare for class” without input from colleagues. Lesson study provides an opportunity for teachers to benefit from one another's pedagogical knowledge. In the planning phase, team members usually begin by sharing how they have taught or would teach the lesson, discussing and debating the merits of different types of class activities, assignments, exercises and so forth. To keep the focus on student learning, though, teachers also pool their knowledge of how students in the past have learned or struggled to learn the topic at hand. Once past experiences and personal approaches are on the table, the team can begin to design a lesson that will help students achieve the chosen learning goal. With the learning goal in mind, teachers propose instructional activities that make student thinking visible, that is, open to observation and analysis. This is essential in order for the team to see how students learn from the lesson when it is taught. Throughout the planning process, teachers practice cognitive empathy, looking at the subject matter from the student's point of view, working to understand how students learn. When planning the lesson, teachers try to anticipate how students will perceive, interpret and construe the subject matter and the lesson activities.

Lesson study does not prescribe a specific teaching method or strategy. But, the lesson should produce evidence of student learning and thinking that can be observed,

documented and analyzed. This has pedagogical implications. For example, a lesson in which students sit and take notes the entire class period is probably not a good candidate for lesson study.

The lesson should be described in enough detail that another teacher could use it. This does not mean that every word is scripted. But, the plan is more than a general overview, and should describe fully the sequence of lesson activities, the material the teacher will use in class, the teacher's questions, anticipated reactions of students, and possible responses to students' questions.

4. Plan the Study

As teams plan the lesson they also look ahead to how they will study student learning when the lesson is taught. In this phase, teams identify the types of evidence they plan to collect and decide how to observe and gather evidence of student learning. In preparation for teaching the lesson, teams think about how to collect evidence that will help them determine how students learned and their progress toward the learning goal. Teams develop observation guidelines based on their predictions of student responses and decide what types of evidence will be collected from students. Live observation is essential as it allows instructors to follow student learning throughout the class period, note changes in student thinking and how different parts of the lesson affect students. But teams also supplement observations with additional evidence such as written work that students complete as part of the lesson. Teams prepare "Observation Guidelines" that indicate how to observe the lesson, whom to observe, what to focus on, and how to record observations. Observers follow the guidelines to gather evidence when the lesson is taught.

5. Teach and Observe

In this step, one member of the group teaches the lesson, and other group members attend the class to observe and collect evidence of student learning, thinking and engagement. Before the actual class period, inform students about the lesson study and the observers that will be in the classroom. This is also a good time to distribute and collect informed consent forms. On the day of the lesson, introduce the observers to the class and describe what they will be doing. Traditional classroom observations tend to focus on what the teacher does during the class period. Lesson study observations lessons focus on students and what they do in

response to instruction. To help them perform effectively, observers should have a copy of the lesson plan, any student handouts used in the lesson, and a copy of the observation guidelines.

6. Analyze and Revise

After the lesson is taught, while it is still fresh in everybody's minds, the team members and the outside invited observers hold a debriefing meeting to discuss and analyze the lesson. Teams may want to establish a few ground rules for the discussion, e.g., focus on the lesson (not the teacher) and on analyzing what, how and why students learned or did not learn from the experience. The debriefing focuses on three core questions: *In what ways did students accomplish the lesson goals? How could the lesson be improved? What did we learn from this experience?*

During the debriefing participants offer their observations, interpretations and comments on the lesson. The purpose is to analyze and evaluate the lesson thoroughly in terms of student learning, thinking and engagement. After the debriefing, the team holds additional meetings to further organize and analyze their findings.

As a result of their analysis, teams identify ways to revise the lesson. Some teams stop at this point but typically, lesson study involves a second research cycle in which the team teaches and studies the revised lesson. Teams may also modify their strategies for collecting evidence to align them more effectively with the revised lesson.

7. Document and Disseminate

Lesson study investigates how students think and respond to our instruction. Teachers observe the kinds of difficulties and problems students commonly experience in the classroom. Even when lessons—or our attempts to study them—do not go as planned, they help us understand how teaching affects student learning and development.

By documenting your lesson study work, you contribute to a pedagogical knowledge base for teachers and researchers in your field. We invite college lesson study practitioners to publish their lesson study materials and research findings in the Lesson Study Showcase. Lesson Study is substantive professional work that should count in retention, promotion and tenure. The Teaching Improvement Profile Template is intended to help you write a coherent summary of your lesson study work that you could use as evidence of teaching improvement. Many teams also present their work at campus and professional conferences and publish in discipline-specific or scholarship of teaching and learning periodicals.

5. Importance of Lesson study:

1. **Teaching Improvement:** It is an ideal venue for teaching improvement. In contrast to workshops and seminars that discuss general teaching strategies, lesson study looks directly at one's classroom. Teachers focus on how their students learn and what kinds of instructional activities support student learning and thinking. By focusing on one lesson, instructors can learn about students, instruction, goals, and subject matter without undertaking extensive course revision.
2. **Instructional Materials:** Lesson study results in a field tested lesson and materials that can be used and adapted by other instructors. The systematic, evidence-based approach makes it possible for teachers to build on one another's work. By the end of the lesson study process, teams produce knowledge about how students learn from instruction.
3. **Teaching Community:** The Lesson study process helps build communities of practice around teaching. Instructors report that collaborating with their peers is a particularly rewarding experience. Lesson study cultivates mutual understanding of goals, teaching practices and student learning among teachers.
4. **Scholarly Inquiry:** Lesson study is a form of the Scholarship of Teaching and Learning, the final products are suitable for professional presentations and publication. Lesson study integrates teaching and research, theory and practice.

6. Conclusions:

1. Lesson study is a professional development process that Japanese teachers engage in to systematically examine their practice. The goal of lesson study is to improve the effectiveness of the experiences that the teachers provide to their students.
2. Focused and energized collaboration, insight into student learning, development of a strong lesson plan and facilitation of pedagogical research are the principles of Lesson study.
3. Form a Team, Develop Learning Goals, Design the Lesson, Plan the Study, Teach and Observe, Analyze and Revise and document and disseminate are the steps involved in Lesson study.
4. Teaching Improvement, development of Instructional Materials, Formation of Teaching Community and the Scholarly Inquiry for teaching and learning are the important outcomes of Lesson study.

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Websites

Lesson Study Group at Mills College. Webpage access: <http://www.lessonresearch.net/>

Chicago Lesson Study Group. Webpage access: <http://www.lessonstudygroup.net/>

Center for Lesson Study, William Patterson University. Webpage access:

<http://www.wpunj.edu/coe/lessonstudy/>
