

# Strengthening School-University Partnership through 'Lesson Study' in School Internship

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## Abstract

*School-university partnership is gaining momentum for the preparation of prospective teachers. The authors are of the view that lesson study, with its proven effectiveness in other countries, can be adapted and followed in the school internship of pre-service teacher education programmes in India. It can go a long way in strengthening the partnership between the school and teacher education institutions, which at present is just ornamental. It would lead to a win-win situation for both by equipping the prospective teachers with the skills to handle the real classroom situations effectively under the mentorship of school teachers and facilitating the school mentors in their professional growth with the shared focus on school students' learning. The seeds of sustainable professional development could also be sown among prospective teachers during school internship through the adoption of lesson study practices. Against this backdrop, the authors have suggested an adapted model of lesson study and conditions for its success in India.*

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## INTRODUCTION

Like any other professional programme, theory and practice are inextricable components of a

teacher education programme. But the successful amalgamation of the knowledge which is being transacted within the four walls of the university

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classroom and its application in the territory of the school is the real challenge. The pre-service teacher education programme attempts to address this challenge by providing practical school experiences through internship in schools. These practical field experiences aim at familiarising student-teachers with school classrooms, thereby helping them to avoid a 'reality shock' in the initial phase of their teaching career (Musset, 2010). Therefore, there is a need to develop an exhaustive alliance between teacher education institutions and schools to prepare all-inclusive future teachers (Darling-Hammond, 2006; Down, et al., 1994).

The conventional model of school internship views school as a site provider for teaching practice as teacher preparation is mainly considered a responsibility of teacher education college or university department. But the partnership model that accepts a triadic relationship between university supervisor, student-teacher and school mentor, enfold the belief that the teacher education programme has the potential to create efficient, effective and successful future teachers through school-university partnership (Clark, 1999; Huong, et al., 2020; Kenny, 2012).

It is a collaborative setting in which both the agencies are at equal footing towards their development while

addressing some common issues that persist (Gilles, et al., 2009).

The partnership opens doors for higher education academics and school teachers to utilise each other's expertise and experience for their professional development. With teacher education institutions' onus to educate and prepare future teachers, higher education academics appear in a position to advance school teachers in making use of effectual teaching-learning procedures, which may also be esteemed as a reference point for pre-service teachers. Alternatively, schools, as a site of ground realities, supply adequate knowledge that enables teacher education institutions to conceive the courses of teacher education, elicited from substantial needs. On that account, a partnership between schools and teacher education institutions give rise to a constructive ambience that is indispensable for professional learning (Letloenyane and Loyiso, 2015).

### **LESSON STUDY FOR PROFESSIONAL DEVELOPMENT OF TEACHERS**

A recent reform that is manoeuvring all the requisites of a partnership approach to teacher education springs from Japan in the form of 'lesson study' (*jugyoukenkyuu*). 'Lesson study' is a school-based professional development in which a set of teachers and knowledgeable others collaborate in an iterative

process that involves identification of a problem, planning of a research lesson, teaching of the research lesson followed by collective observation of the lesson by the group members and, ultimately, a critical reflection in the post-lesson meeting (Fig.1). This may also lead to the collective development of the modified version of the research lesson and progression again around the cycle. The lessons that are the object of teachers' study in a lesson study process are called research lessons (Fernandesz and Yoshida, 2004). They are developed to test and exercise an idea within the actual classroom context (Stigler and Hiebert, 1999). The knowledgeable others in a lesson study cycle are experts from the concerned field including teacher educators, who make a valuable contribution to the post-lesson discussions by providing insights associated with research and in-depth knowledge of the curriculum (Doig and Groves, 2011).

The assumption grounded in the practice of lesson study is that the teaching-learning process could be made effective by way of preparing and teaching a research-based lesson in a classroom context. The role of the teachers is not confined to practising educational theories in the classroom; rather, they can also execute research on their own to address an immediate issue. In this way, the gulf between practice and research can be minimised (Stigler and Hiebert, 1999).

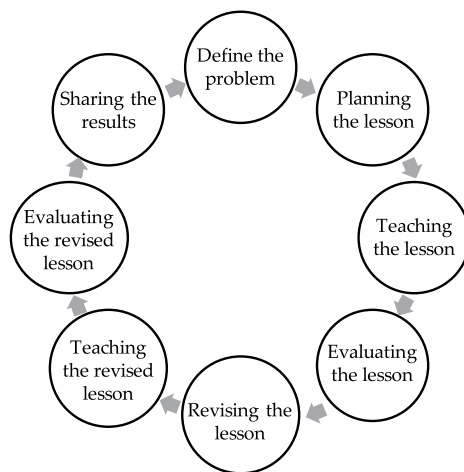


Figure 1: Steps involved in a Lesson study cycle in Japan (Stigler and Hiebert, 1999).

### ESSENTIAL FEATURES OF LESSON STUDY

1. Lesson study promotes site-based teachers' improvement that gets developed in the real classroom scenario, taking local context into account (Stigler and Hiebert, 1999).
2. The collaboration between the teachers and knowledgeable others is compulsory for the transition from one step to another.
3. Research lesson developed in consultation with the cooperative school mentor teacher is the hallmark of lesson study.
4. All the activities in the lesson study cycle revolve around students' learning. Deliberations are made based on the data of students' learning, before enacting changes in the research lesson.

5. It is research-oriented as from planning to the assessment of the research lesson all decisions are developed on careful investigation, not intuition.
6. The practice of lesson study provides expansive scope for teachers to reflect on their own, other group members' teaching practices and students' learning.

### **RESEARCH SUPPORT FOR LESSON STUDY IN PRE-SERVICE TEACHER EDUCATION PROGRAMME**

In the past two decades, educational researchers have validated the potency of lesson study to develop a flair for teaching. As pre-service teachers absorb themselves in the lesson study process, their lesson planning and readiness for delivering a lesson improve remarkably (Marble, 2007; Naesheim-Bjorkvik and Larssen, 2019). In addition to classroom teaching, they become magnificent assessors of the learning environment in the matter of selecting teaching-learning material, content, assessment strategies and the progression of the lesson, which subsequently promotes confidence and teaching skills (Marble, 2007). It also serves as a tool for acquainting pre-service teachers to the school culture (Boonsena, et al., 2019).

The involvement of mentor teachers with pre-service teachers makes practice teaching a collaborative effort. The decisions related to teaching and learning

in field placements lean on the understanding of students' course of action in the classroom and scaffolding from the mentor which translates into pre-service teachers' 'pedagogic capital' and the lesson study paves the way to the students' unnoticed 'pedagogic black box' (Cajkler and Wood, 2016). The guidance provided at every level of lesson study promotes specific observations, not general (Munthe, et al., 2016). Pre-service teachers observed but important events related to students' learning, their own and other group members' teaching (Amador and Weiland, 2015). They reckon themselves as lifelong learners. The lesson study bestows them with an equity lens so that they can plan learning experiences concerning the individual needs of the students (Parks, 2008).

Lesson study can be utilised to detect the effectiveness of propounded teaching and learning strategies and to construct the locally relevant theoretical framework. It reduces the theory-practice divide, keeps a check on the culture of teaching being transferred from one generation to another and culminates into a knowledge base for teaching and teachers' preparation (Hiebert, et al., 2003; Hj Iksan, et al., 2014). It serves as a vehicle for pre-service teachers' professional development through channelising into reflective practice relevant to learning goals, students' understanding, appropriate content representation and students' assessment which leads to better

students' learning outcomes (Espinosa, et al., 2018)

The theory-practice rift can be covered when pre-service teachers are enabled to analyse the first-hand result of their teaching. The lesson study prepares them for taking up the future role of educational researchers and teacher educators. Lesson study brings out a balance between pre-service teachers' creative student-centred pedagogic practices and experienced teachers' expertise in traditional repertoire of the teaching-learning process, during collective collaborative activity (Hart, et al., 2011). The mentor teachers and university supervisors as knowledgeable others have the potential to create a dialogic space of 'inter thinking' and to direct the pre-service teachers' conversations in a productive direction, towards students' learning (Bjuland and Helgevold, 2018; Hart, et al., 2011).

### **LESSON STUDY FOR PRE-SERVICE TEACHER EDUCATION**

Countries like the USA, Canada, England, Greece, Turkey, Thailand, Ireland, Spain, Norway, South Africa and Indonesia are assimilating the process of lesson study in their initial teacher education programmes (Kanellopoulou and Darra, 2019).

### **ADAPTATION OF LESSON STUDY IN PRE-SERVICE TEACHER EDUCATION IN INDIA: SUGGESTED MODEL**

Traditionally, teaching is considered a private activity (Stigler and Hiebert,

1999). Teachers go through a feeling of hostility when external educational authorities or the school's quality assurance committee observes their classroom teaching. The collaborative nature of the lesson study holds that successful teaching is a joint responsibility, not the jurisdiction of an individual (Stigler and Hiebert, 1999). Working in a community of practice accelerates student teachers' cognitive and social interactions (Cohan and Honigfeld, 2006; Kostas, et al., 2014), initiates the collaborative reflection and provides a window of opportunities to ask questions and clarify doubts (McMohan and Hines, 2008; Post and Varoz, 2008).

The existing consecutive and concurrent programmes of teacher education in India provide for 16- and 20-weeks exhaustive school internship, respectively. The cooperative schools are thought out as lab schools, attached to a teacher education institute, which further the pre-service teachers' interaction with school students, teachers, and community. The pre-service teachers are expected to work as full-time teachers in a cooperative school under the leadership of the school principal and guidance of school mentors. At least 25 per cent of the total lesson plans delivered by the pre-service teachers for each subject are observed and evaluated. Apart from teaching in the cooperative schools through preparing unit plans and lesson plans, the pre-service teachers also observe the classroom

teaching by school teachers and their fellow pre-service teachers, analyse syllabi and textbooks, and prepare diagnostic tests and plan for remedial teaching, conduct action research and case studies. Teacher education institute's supervisors, cooperative school principal and school mentors do the pre-service teachers' assessment during school internship collectively. (National Council for Teacher Education Notification, dated 28 November 2014, New Delhi; School Internship: Framework and Guidelines, 2016).

Experience shows that the student teachers are treated as aliens in the practising school. The supervision is done by the teacher educators and the school teachers, called cooperative teachers/school mentors. The majority of the school mentors, if involved in the supervision of student teachers, try to help the student teachers by giving positive comments rather than participating effectively in the teacher preparation process to prepare effective teachers. Generally, the schools also do not facilitate the students to participate in various activities of the school under the guidance of school teachers. The pre-service teachers, therefore, enter the teaching profession with a restricted understanding of social, cultural, and political perspectives that shape a school context. In this model, the student, teachers, university supervisors and the school faculty do not take the advantage of

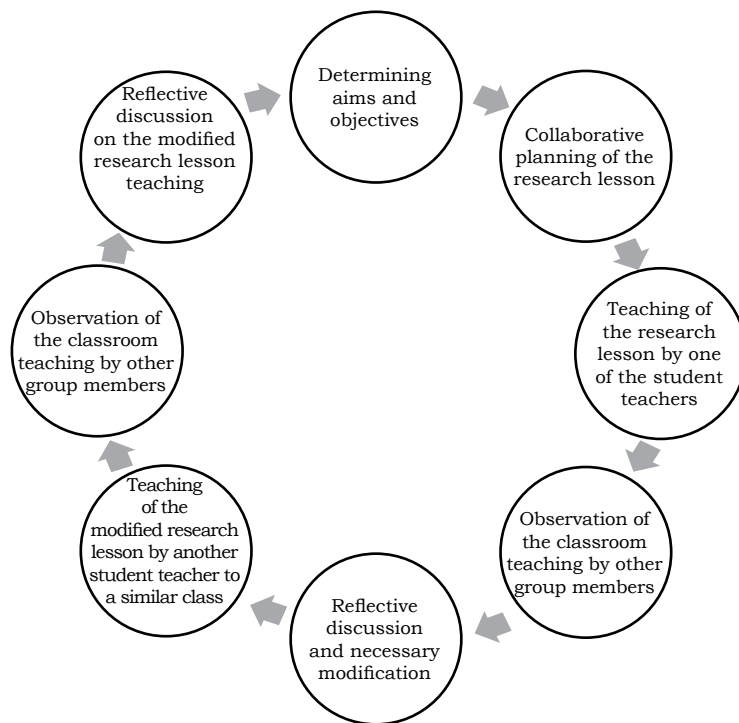
each other's presence in the school for their professional development.

Given the above scenario, the symbiotic relationship between pre-service teachers, school mentors and university supervisors in the lesson study process cannot be neglected. The National Education Policy, 2020 has acknowledged the role of mentors in teacher education. It also suggests the association of higher education institutions with schools, wherein pre-service teachers will teach and participate in other activities of the school. This demands a partnership between schools and teacher education institutions. Partnership, in the form of inquiry-based lesson study, has the potential to cohere both the agencies into a collaborative relationship, in contrast with the usual theory-practice divide (Helgevold and Wilkins, 2019).

Figure 2 shows the suggested model of lesson study that may be used in the pre-service teacher education programmes in India.

### **Determining Aims and Objectives**

The review has revealed that in pre-service teacher education, the research lesson hinges on an overarching goal which is identified from the current syllabus, textbooks (Hj Iksan, et al., 2014) or state curriculum standards (Akerson, et al., 2017; Fernandez, 2010; Parks, 2008; Post and Varoz, 2008; Yakar and Turgut, 2017) and sometimes, prescribed by the educators (Amador



*Figure 2: Lesson Study Cycle for Initial Teacher Preparation in India.*

and Weiland, 2015), taking into cognizance the multiple curricula about the topic, related articles and researches (Parks, 2008), problems faced by teachers during transacting particular topics, misconceptions of students and learning challenges identified by sample students (Bjuland and Helgevold, 2018; Cajkler and Wood, 2016; Hart, et al., 2011).

However, in India, it is not feasible that all the lessons are delivered through lesson study as school teachers and teacher educators may not be able to so much time to do justice with the requirements. It is, therefore, recommended that out of the

total duration of the school internship, at least two weeks may be assigned for lesson study. For a research lesson, a precise goal can be opted to address a particular topic from one discipline. The topic will be chosen as per the school mentor's preferences, university supervisor's inputs related to the placement of topic within academic literature and student teachers' personal intent for their professional development. In the discussion of topic selection, the knowledgeable other will guide the group for the development of aims and objectives for a research lesson. It can undergo numerous rounds of refinement.

### **Collaborative Planning of the Research Lesson**

Collaborative planning is a new term for practising teachers in India. Most of the teaching in schools relies upon the activities given in the textbooks and the teachers develop individualistic lesson plans. The lesson planning in lesson study is not ordinary. Its main determinant is *Kyouzai Kenkyuu*, which is a thorough consideration of the curriculum materials and research literature for situating the lesson plan in a cogent theoretical framework. It is improbable for school mentors to have access to a wide range of sources or the time and authority to manage sources to be used in research lessons. The university supervisor will assist the pre-service teachers in locating the resources and researches to plan research lessons collaboratively with the school mentor, focusing upon students' learning.

### **Teaching of the Research Lesson by One of the Student Teachers**

One of the student teachers from the lesson study group will teach the planned research lesson to a predetermined class of students.

### **Observation of the Classroom Teaching by Other Group Members**

Many people usually observe the observation phase in the Japanese lesson study cycle. The other group members include lesson study group

members, school teachers, teachers from other schools and school education board personnel. In the current model of school internship in India, university supervisors and school mentors observe the classroom teaching of pre-service teachers and in some universities, an outsider is called to evaluate the final lesson. These observations judge the teaching performance of the pre-service teachers and suggest further improvements. The existing practice of classroom observation cannot be transformed in one go. The first step will be to tutor the lesson study group to write detailed observation notes, which will facilitate the debriefing session. Only the members of lesson study group will observe the classroom teaching. An observation scale can be introduced to pre-service teachers from the university supervisor for collecting scrupulous observations and the same can be shared with other members of the group (in-service teachers). For focused observations, sample students will be identified and their learning will become the source of research lessons (Cajkler and Wood, 2016). Sample students can be interviewed about what they learned during the research lesson.

### **Reflective Discussion and Necessary Modification**

The knowledgeable other in a lesson study cycle in Japan is customarily an expert from the field of education who synthesizes the reflective



discussions in the debriefing session and relate the discrete pedagogical learning with the broad educational theoretical framework. But in the Indian context, the university supervisor and cooperative school mentor teacher must take on the role of knowledgeable others. The university supervisor may not participate in the process directly, but will prepare the pre-service teachers for lesson study by familiarising them with the process, presenting practical suggestions and resources. In the current scenario, the university supervisor visits the cooperative school to observe the classroom teaching of pre-service teachers. During this visit, the university supervisor will investigate the progression of the lesson study cycle and give a helping hand, if necessary. The cooperative school mentors, as knowledgeable others, will introduce the pre-service teachers to the school classroom, provide their expertise for selecting topics for research lessons in connection with students' learning and their professional development. They will also observe the pre-service teachers' teaching and lend thorough feedback in a debriefing session.

The knowledgeable other will perform the duty of a moderator to facilitate the pre-service teachers to reflect upon students' thinking when they have not understood a concept so that the research lesson can be polished up.

### **Teaching of the Modified Research Lesson by Another Student Teacher to a Similar Class**

The re-teaching of the research lesson is not mandatory in Japan. The researchers in Japan pay attention to learning from lesson study, not perfecting a specific lesson. As we will incorporate the lesson study in our secondary teacher education programmes, we would like all the pre-service teachers to go through the above steps in a lesson study cycle. If a lesson study group has two pre-service teachers—, a cooperative school mentor and one university supervisor, we will recommend two lesson study cycles so that both the pre-service teachers will get a chance to teach.

### **Observation of the Classroom Teaching by Other Group Members**

While the other student teacher will teach the modified research lesson to a similar class of students, the remaining group members will take detailed notes of the students' learning.

### **Reflective Discussion and Final Report**

The group members will be engaged in collaborative reflection of the students' learning from the modified research lesson. The group, with the assistance of knowledgeable others, will ruminate whether the requirements for which the

modifications have been made in the preceding research lesson, have been met or not and give suggestions for improvement. In the end, the group will compile all the lesson plans, debriefing minutes and their reflection write-ups in the form of a report to be submitted as a marked component of their teacher education course.

### **CONDITIONS FOR THE SUCCESS OF SUGGESTED MODEL OF LESSON STUDY IN INDIA**

- *Designing New Structures for Partnership*

The lesson study calls for new structures for school internship. To build a sound school-university partnership through advocating lesson study, we need 'boundary spanners' (Clark, 1999). These leaders from universities and schools will act as initiators in a lesson study project and will plan the discourse of action. They will perform the duties of a coordinator and communicate the concerns, issues, and problems to their counterparts.

- *Deciding the Core Principles*

In line with the National Curriculum Framework for Teacher Education, the teacher education institutions will draft their syllabus about field placement and the same will be talked through the school leaders. Although schools and teacher education institutions already assume their joint responsibility to prepare future teachers, a small-scale collaboration is observed. In most cases, school

personnel appear unaware of the role for which pre-service teachers are placed in their school. It is required that the co-partners share a common philosophical base (Clark, 1999), not only on structural concerns but also on matters that are directly related to the professional development of pre-service teachers.

- *Finding Place in Established Norms*

The delivery of a specified number of lesson plans in a prescribed duration is considered as the sign of a successful school internship. The prevailing realities cannot be altered overnight but an attempt can be made to constitute lesson study as a component of school internship. The pre-service teachers, in consultation with school mentors and of the teacher education institute academics of the, will discern the topics that pertain to the immediate needs. The lesson plans of pre-decided units will be delivered through conventional medium and the need-based topics will be executed through lesson study. These topics are difficult areas where cooperative school teachers encounter hurdles in connection with pedagogical content knowledge and students' perceived understanding level.

- *Selection of Mentor Teachers*

'Well qualified and adequately motivated teachers [need] to be associated with TEIs as mentor teachers.' (NCTE, 2016). Qualitative mechanisms should be espoused to select expert mentor teachers across

various disciplines. Mechanism such as classroom observations of teachers who will be volunteers may be used to become mentors and personal interviews by university and school team leaders (Burstein, et al., 1999). Monetary and status (promotion) benefits will uplift the motivation of cooperative schools' mentor teachers, along with pre-service teachers and teacher education institutions' academics ensuring their active participation in lesson study (Huang, et al., 2017; Xu and Pedder, 2015).

- *Hand Holding*

The pre-service and in-service teachers are the keystone of the lesson study process. The preliminary introduction of lesson study has to pre-service teachers. The student teachers will form groups and engage in collaborative planning, teaching and reflection be given where their classmates will act as students (Carrier, 2011; Fernández, 2010). A competent professional from the university, on the recommendation of university leaders, can perform the role of the trainer to orient in-service teachers about lesson study. The training will include simulations, reviewing readings, videotapes, and reflections on lesson study researches.

- *Mentor Teacher and University Academic in Lesson Study Group*

Mentor teachers' constant interaction with pre-service teachers will devise ways to assist and provide guidance to the pre-service teachers. They can learn along with pre-service teachers

using collaborative planning, locating teaching-learning resources and exhibiting effective strategies. In lesson study, the mentor teacher will be in a state to seek university academics' knowledge and pre-service teachers' progressive ideas for school upgradation.

The university academics have an influential role to play in the lesson study team. During initial classroom observations, the pre-service teachers can come up with general themes they have decided to be brought up in the lesson study cycle. Here, the university teachers can support in identifying the specific issues from a general theme. The university teacher will play the role of a 'critical friend', who will become a part of classroom teaching observations and debriefing sessions but avoid giving the answers. Rather, by asking reflective questions, they can encourage the other team members to reflect more on the learning they have witnessed (Clark, 1999). The principal task of a university teacher is to relate the teaching and learning experiences with broad educational theories and their implications, at the end of the debriefing session.

- *Administrative Support*

School leadership and support are decisive factors in the effective accomplishment of lesson study (Xu and Pedder, 2015). A lot of time is devoted to planning research lessons, choosing pertinent experiences and reflections during debriefing sessions. School authorities should

design timetables and make flexible arrangements in such a way that school mentor teachers do not feel burdened by school responsibilities and extra accountability for preparing pre-service teachers (Fernandez, 2002).

- *Establishing Resource Centre*

The association school and university for preparing lesson study should not be a one-time affair. Every year, pre-service teachers along with school mentors and university teachers will undertake lesson studies to address different issues. The lesson study teams require a stable place where they can hold planning meetings, prepare, and keep teaching-learning resources and arrange debriefing sessions. Having their own collective space will evoke the feeling of community and collaborative culture (Burststein, et al., 1999).

- *Time Alignment*

All the activities under the lesson study process should be aligned with the school's calendar. The coordination between the schools and university's calendar will facilitate the smooth achievement of lesson study goals, without disturbing other school events.

- *Adoption of Innovative Assessment Technique*

The desired results of a reformist endeavour, like lesson study, cannot be accomplished without an innovative protocol for pre-service teachers' assessment. Getting remarks as feedback should not be

perceived as sufficient. The school and university leaders shall select or formulate assessment procedures to determine the pre-service teachers' progression through the lesson study process. For instance, appraising the development of pre-service teachers through research lesson plans, reflective discussions in planning and debriefing sessions or self-assessment reports.

- *Teaching as the Focal Point, not the Teachers*

In contrast with the responsibilities and accountability that school teachers shoulder every day, school teaching has always been looked down upon by society. The same notion has been diffused in pre-service teachers as a result of their own past school experiences or what they have heard from their seniors or university teachers. Pre-service teachers coupled with prejudgements about school teachers' disinterest and incompetence would take the lesson study to nowhere. The pre-service teachers and university academics should account for in-service teachers as co-learners, respecting their individuality and experiences during the lesson study process. The focus of the lesson study should be the improvement of teaching for students' learning.

- *Lesson Study Network*

An online government portal should be set up in which lesson studies from all over the nation can be shared. The research lesson

plans, group members' reflections, students' results and suggestions can be publicised this portal and regarded as a reference for groups that are planning lesson study on similar topics.

### CONCLUSION

Lesson study is one of the means by which the school-university partnership can be strengthened. It can lead to the professional

development of both the prospective teachers and in-service teachers in India. Its adoption, however, requires among others, the change in the mindset of school authorities and university faculty. They should treat themselves as co-learners, consider teacher preparation as their joint responsibility and work towards the common goal of improvement of school students' learning.

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