A STUDY OF THE ATTITUDES OF TEACHER EDUCATORS TOWARDS LESSON STUDY USED IN EDUCATION DEGREE COLLEGES

Khin Sandar Hlaing¹ and Soe Soe Thein²

Abstract

The purpose of this study is to explore the attitudes of teacher educators towards lesson study used in Education Degree Colleges. The quantitative research method was used to study the attitudes of teacher educators towards lesson study. In this study, (200) teacher educators from Education Degree Colleges in Magway Region and Mandalay Region were selected by using a simple random sampling technique. To collect data, the questionnaires were based on the investigation of teachers' perspectives on the lesson study process developed by Wright (2009), the implementation of lesson study program for developing professionalism in teaching profession developed by Copriady (2013), and teachers' viewpoints on the practical implementation of lesson study developed by Haghighiford and Marzbon (2016). Six dimensions were comprised for the questionnaires. Due to the means of six dimensions, teacher educators from the selected Education Degree Colleges were more likely to receive professional development through lesson study but it is necessary to implement lesson study practically in a different way. According to the result, there were no significant differences in the attitudes of teacher educators towards lesson study in Education Degree Colleges in terms of teaching services and qualification. And then, there was a significant difference in the attitudes of teacher educators towards lesson study in Education Degree Colleges in terms of designation. It can be concluded that teachers had positive attitudes towards the different parts of the questionnaires that deal with lesson study. This study can give guidelines for teacher educators to conduct better and more effective teaching and learning process so that student teachers will achieve purposeful learning.

Keywords: Attitude, Teacher Educator, and Lesson study

Introduction

In teacher education, lesson study is a collaborative activity that lies at the heart of teacher professional development (Lewis, 2000, cited in Cajkler, Wood, Norton & Pedder, 2013). Japan is the cradle of lesson study. Since the start of the public education system in 1872, it has been the model for teachers' professional development (Takahashi, 2014, cited in Willems & Bossche, 2019). Through lesson study, professional development makes teachers more effective in teaching and learning by exposing educators to new delivery strategies, evaluation styles, and record-keeping methods. The important fact of lesson study is to conduct research: to seek a solution to a teaching and learning problem (Takahashi & McDougal, 2016).

Lesson study can be implemented at all levels to learning, teaching, curriculum development, assessment, teacher education development. Teachers can learn from other experienced teachers through lesson study to become effective future teacher educators of teaching and learning. After all, implementing lesson study to professional education development has effectiveness for both teachers and students, but most importantly, it helps teacher educators to become better educators and develop into the competent educationists.

Purpose of the Study

The purposes of this study are as follows:

- 1. To explore the attitudes of teacher educators towards lesson study used in Education Degree Colleges in each dimension.
- 2. To compare the attitudes of teacher educators towards lesson study used in Education Degree Colleges in terms of teaching services, qualification and designation.

¹ Department of Methodology, Magway Education Degree College

² Department of Curriculum and Methodology, Sagaing University of Education

3. To give suggestions and recommendations based on the results of the study.

Research Questions

- 1. How do teacher educators consider lesson study used in Education Degree Colleges?
- 2. How do the attitudes of teacher educators towards lesson study differ in terms of teaching services, qualification, and designation?

Definition of Key Terms

Attitude: Attitude is an evaluative statement or judgment concerning objects, people, or events (Robbins & Judge, 2013).

Teacher Educator: A teacher educator is a person who teaches at a teacher education institution or supports students' field work in schools, and contributes substantially to the development of students towards becoming competent teachers (Koster 2002, cited in Lunenberg, Dengerink & Korthagen, 2014).

Lesson Study: Lesson study is an approach to professional development that centers on collaboration. Lesson study is a structured approach to teacher learning, and certain common elements are necessary to justify calling it lesson study (Bjuland, & Mosvold, 2015).

Scope of the Study

This research is intended to study the attitudes of teacher educators towards lesson study used in Education Degree Colleges. All teacher educators from Education Degree Colleges in Magway Region and Mandalay Region were selected as participants in this study in 2021- 2022 Academic Year.

Review of Related Literature

Characteristics of Lesson Study

Lesson study incorporates many characteristics of effective professional development activities for teachers and students to enhance the effectiveness of teaching and learning situation, especially pre-service, and in-service teacher education. Murata (2011) suggested that a number of the characteristics of lesson study are listed below.

Lesson study is centered on teachers' interests: Teachers' interests are central to their professional development. Lesson study goals should be something teachers feel is vital to research and relevant to their own classroom practice.

Lesson study is student focused: Lesson study is about student learning. At any component of the lesson study cycle, the activities should focus teachers' attention on student learning and its connections to lesson/teaching.

Lesson study features a research lesson: Teachers have shared physical observation experiences (in some special cases, video could also be utilized in place of class lessons but this is often not recommended), that provide opportunities for teachers to be researchers.

Lesson study may be a reflective process: Lesson study provides many time and opportunities for teachers to reflect on their teaching practice and student learning, and therefore the knowledge gained from and for the reflective practice should be shared in some format with the larger teaching and academic communities.

Lesson study is collaborative: Teachers work interdependently and collaboratively in lesson study.

By understanding how different assumptions of lesson study could also be modified while maintaining these key characteristics, teachers will better understand the prevailing educational system and cultural values and beliefs that support the system. If necessary, these key characteristics can be adaptable. Thus, in turn, helps teachers understand how different parts of the system work and what parts are more critical to the system than the others. Therefore, lesson study can provide that chance. And it is at the heart of every teacher's practice to promote long term teaching improvement.

Effectiveness of Lesson Study

The effectiveness of lesson study is that teachers can share experiences and skills, learn from each other, develop their competencies and self-confidence and construct better lesson methods (Project of SCCA- phase 2, 2011).

According to Podhorsky and Fisher (2007), there are several strengths of lesson study as a process.

- emphasis on planning meaningful lessons that meet student needs,
- inquiries about student assessment, and
- the impetus for formulating short and long-term curriculum goals,
- increased levels of reflection on teaching practices,
- the lesson study learning community as the basis of the professional development program,
- the relationship of the lesson study teams,
- the structure of lesson study as a model for teacher-led professional development,
- its emphasis on lesson planning, and
- its excellent preparation for professional teaching standards.

Research Method

A quantitative research method was used. A survey was made to collect data to study the attitudes of teacher educators towards lesson study used in Education Degree Colleges. This study was conducted in Magway Region and Mandalay Region. The number of participants was (200) and they were selected by using a simple random sampling method to carry out the research work. As for the instrument, questionnaires were constructed on the basic of questionnaires of Wright (2009), Copriady (2013), and Haghighiford & Marzbon (2016). After preparing the instruments, validity was determined by the expert judgments. Then the pilot test was conducted and the Cronbach's alpha internal consistency reliability for the instrument was determined. Since the results of the pilot test were reliable and valid, the instrument was employed to collect the data for the main study. And then the major survey was conducted in four Education Degree Colleges in Magway Region and Mandalay Region. Finally, the data obtained from this survey was analyzed by using Statistical Package for the Social Sciences (SPSS) version 25. The data were analyzed by using descriptive statistics. Moreover, one-way ANOVA was performed whether there were any significances in the attitudes of teacher educators towards lesson study.

Findings

Findings for the Attitudes of Teacher Educators towards Lesson Study Used in Education Degree Colleges for each Dimension

In order to find out the attitudes of teacher educators towards lesson study used in Education Degree Colleges in terms of acceptance on lesson study, understanding lesson study, collaboration in lesson study, professional development through lesson study, effectiveness of lesson study, and practical implementation of lesson study, means and standard deviation were analyzed. Table 1 showed means and standard deviations of the attitudes of teacher educators towards lesson study used in Education Degree Colleges in each dimension.

Table 1 Means and Standard Deviations for the Attitudes of Teacher Educators towards Lesson Study Used in Education Degree Colleges in each Dimension

No.	Dimension	No. of Item	N	Minimum	Maximum	M	SD	Average Mean
1	Acceptance on Lesson Study	10	200	27	50	41.04	3.65	4.10
2	Understanding Lesson Study	10	200	29	50	41.11	3.66	4.11
3	Collaboration in Lesson Study	10	200	30	50	40.93	3.38	4.09
4	Professional Development through Lesson Study	10	200	30	50	41.16	3.63	4.12
5	Effectiveness of Lesson Study	10	200	30	50	41.05	3.49	4.10
6	Practical Implementation of Lesson Study	10	200	28	50	40.29	3.71	4.03
	Total/Average	60	200	180	300	245.57	19.07	4.09

Table 1 showed that the mean for the attitudes of teacher educators towards professional development through lesson study was found the highest (4.12) and for the mean of practical implementation of lesson study was found the lowest (4.03). Therefore, teacher educators from selected Education Degree Colleges were more likely to receive professional development through lesson study and it is necessary to implement lesson study practically in a different way. To be clear, Figure 1 illustrated the comparison of means of teacher educators' attitudes for each dimension.

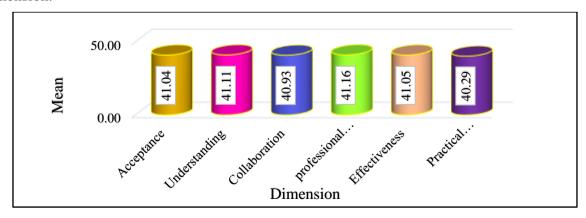


Figure 1. The comparison of means for the attitudes of teacher educators towards lesson study used in education degree colleges in each dimension.

Findings for the Attitudes of Teacher Educators towards Lesson Study Used in Education **Degree Colleges in terms of Teaching Services**

To find out whether there was a significant difference in the attitudes of teacher educators towards lesson study used in Education Degree Colleges in terms of teaching service, one-way analysis of variances (ANOVA) was used. In this study, there were six groups of teaching services (0-5, 6-10, 11-15, 16-20, 21-25, and 26 and above) years (See Table 2).

Table 2 Table of Comparison of Mean and Standard Deviation on Each Dimension in **Terms of Teaching Services**

Teaching	N	M/SD			Dimension			
Service	IN	MI/SD	D1	D2	D3	D4	D 5	D6
0.5	42	M	41.26	41.60	41.31	41.48	41.48	40.98
0-5	42	SD	3.53	4.06	4.06	4.07	3.97	4.11
c 10	20	M	40.13	40.26	40.74	40.89	40.89	39.47
6-10	38	SD	3.06	2.81	2.31	3.45	3.27	3.34
11 15	22	M	40.37	40.31	40.31	40.19	40.31	39.12
11-15	32	SD	4.01	3.23	3.02	3.29	3.15	4.00
1 < 20	25	M	41.03	41.00	40.26	41.00	40.34	40.03
16-20	35	SD	4.11	4.28	3.04	3.25	2.58	2.94
21.25	10	M	41.00	41.08	40.75	41.00	41.42	40.75
21-25	12	SD	2.25	3.39	2.38	2.95	3.03	3.36
26 and	41	M	42.20	42.10	41.83	42.02	41.83	41.32
above	41	SD	3.77	3.59	4.09	4.02	4.14	3.76
T-4-1	200	M	41.04	41.10	40.93	41.16	41.05	40.28
Total	200	SD	3.65	3.65	3.38	3.63	3.49	3.70

Note: D1= Acceptance on lesson study

D2= Understanding lesson study

D3= Collaboration in lesson study D4= Professional development through lesson study

D5= Effectiveness of lesson study D6= Practical implementation of lesson study

To describe the significant difference in the various dimensions in terms of teaching services, the collected data were analyzed by using ANOVA (See Table 3).

Table 3 ANOVA Results of the Attitudes of Teacher Educators towards Lesson Study Used in Education Degree Colleges in terms of Teaching Services.

No.	Dimension	Teaching Services	Sum of Squares	df	Mean Squares	F	Sig.
		Between Groups	57.369	5	11.474	.855	.512
1	Acceptance on lesson study	Within Groups	2602.311	194	13.414		(ns)
	stady	Total	2659.680	199			
		Between Groups	30.651	5	6.130	.452	.812
2	Understanding Lesson Study	Within Groups	2632.144	194	13.568		(ns)
	Study	Total	2662.795	199			
		Between Groups	106.062	5	21.212	1.899	.096
3	Collaboration in Lesson Study	Within Groups	2166.958	194	11.170		(ns)
	Lesson Study	Total	2273.020	199			
	Professional	Between Groups	107.920	5	21.584	1.662	.146
4	Development through	Within Groups	2518.960	194	12.984		(ns)
	Lesson Study	Total	2626.880	199			
	Effectiveness of	Between Groups	54.907	5	10.981	.897	.484
5	Lesson Study	Within Groups	2374.593	194	12.240		(ns)
		Total	2429.500	199			
	Practical	Between Groups	68.247	5	13.649	.998	.420
6	Implementation of	Within Groups	2652.508	194	13.673		(ns)
	Lesson Study	Total	2720.755	199			
		Between Groups	2071.740	5	414.348	1.143	.339
	Total	Within Groups	70313.280	194	362.440		(ns)
		Total	72385.020	199			

Note. ns = not significant

According to Table 3, there was no significant difference in the attitudes of teacher educators towards lesson study used in Education Degree Colleges in terms of teaching services F(5,194) = 1.143, p > .05. This means that the attitudes of teacher educators towards lesson study had nearly the same in terms of teaching services.

Findings for the Attitudes of Teacher Educators towards Lesson Study Used in Education Degree Colleges in terms of Qualification

To find out whether there was any significant difference in the attitudes of teacher educators towards lesson study used in Education Degree Colleges in terms of qualification, one-way analysis of variances (ANOVA) was used. In this study, there were five groups of qualifications (BA/BSc, BEd, MA/MSc, MEd and PhD) (See Table 4).

Table 4 Table of Comparison of Mean and Standard Deviation on Each Dimension in **Terms of Qualification**

0 110	3.7	N.T.	N//CD	Dimension							
Qualification	N	M/SD	D1	D2	D3	D4	D5	D6			
B.A./BSc.	12	M	40.92	40.77	40.54	40.46	40.54	40.31			
D.A./DSC.	13	SD	1.75	2.65	2.79	2.07	2.07	1.11			
D.E.I	65	M	41.71	41.55	41.11	41.18	41.09	40.66			
B.Ed.		SD	3.71	3.54	3.40	3.71	3.60	3.88			
M.A./M.Sc.	88	M	41.13	41.39	41.32	41.89	41.61	40.39			
WI.A./WI.SC.		SD	3.27	3.79	3.41	3.53	3.43	3.85			
M.Ed.	33	M	39.52	39.64	39.73	39.48	39.64	39.30			
M.Eu.		SD	4.69	3.83	3.37	3.81	3.65	3.58			
Ph.D.	1	M	42.00	40.00	40.00	40.00	42.00	39.00			
FII.D.	1	SD	00.00	00.00	00.00	00.00	00.00	00.00			
Total	200	M	41.04	41.10	40.93	41.16	41.05	40.28			
	200	SD	3.66	3.66	3.38	3.63	3.49	3.699			

Note: D1= Acceptance on lesson study D2= Understanding lesson study

D3= Collaboration in lesson study D4= Professional development through lesson study

D5= Effectiveness of lesson study D6= Practical implementation of lesson study

To describe the significant difference in the various dimensions in terms of qualification, the collected data were analyzed by using ANOVA. Table 5 showed the results of the attitudes of teacher educators towards lesson study used in Education Degree Colleges in terms of qualification.

Table 5 ANOVA Results of the Attitudes of Teacher Educators towards Lesson Study Used in Education Degree Colleges in terms of Qualification

No.	Dimension	Qualification	Sum of Squares	Df	Mean Squares	F	Sig.
1	Acceptance on	Between Group	107.443	4	26.861	2.052	.089
	Lesson Study	Within Group	2552.237	195	13.088		(ns)
		Total	2659.680	199			
2	Understanding	Between Group	93.926	4	23.481	1.782	.134
	Lesson Study	Within Group	2568.869	195	13.174		(ns)
		Total	2662.795	199			
3	Collaboration in	Between Group	65.907	4	16.477	1.456	.217
	Lesson Study	Within Group	2207.113	195	11.319		(ns)
		Total	2273.020	199			
4	Professional	Between Group	146.759	4	36.690	2.885	.024*
	Development through	Within Group	2480.121	195	12.719		
	Lesson Study	Total	2626.880	199			
5	Effectiveness of	Between Group	98.323	4	24.581	2.056	.088
	Lesson Study	Within Group	2331.177	195	11.955		(ns)
		Total	2429.500	199			
6	Practical	Between Group	43.599	4	10.900	0.794	.530
	Implementation of	Within Group	2677.156	195	13.729		(ns)
	lesson Study	Total	2720.755	199			
		Between	2917.076	4	729.269	2.047	.089
	Total	Groups	69467.944	195	356.246		(ns)
	10181	Within Groups	72385.020	199			
_		Total					

Note. *p< .05, ns = not significant

According to Table 5, there was any significant difference in the attitudes of teacher educators for professional development through lesson study in terms of qualification F(4,195) =2.885, p< .05. However, there was no significant difference among their qualification for other dimensions. It can be assumed that the attitudes of teacher educators selected Education Degree Colleges are nearly the same in the dimensions of acceptance on lesson study, understanding lesson study, collaboration in lesson study, the effectiveness of lesson study, and practical implementation of lesson study. However, their attitudes differed in the dimension of professional development through lesson study according to their qualification.

Findings for the Attitudes of Teacher Educators towards Lesson Study Used in Education **Degree Colleges in terms of Designation**

To find out whether there was any significant difference in the attitudes of teacher educators towards lesson study used in Education Degree Colleges in terms of designation, oneway analysis of variances (ANOVA) was used. In this study, there were five groups of designation (Tutor, Assistant Lecturer, Lecturer, Associate Professor, and Professor) (See Table 6).

Table 6 Table of Comparison of Mean and Standard Deviation on Each Dimension in **Terms of Designation**

Desirent	N T	N T	N.T.	N T	MICD			Dime	nsion		
Designation	N	M/SD	D1	D2	D3	D4	D5	D6			
Tutor	68	M	41.29	41.57	41.24	41.74	41.37	40.63			
Tutoi	00	SD	3.33	3.64	3.47	3.67	67 3.57 3.8	3.87			
Assistant	58	M	40.10	40.28	40.22	39.83	40.50	39.69			
Lecturer	50	SD	3.66	3.13	2.96	3.38	3.44	3.54			
Lecturer	7	M	39.43	40.29	41.14	40.00	39.57	39.29			
Lecturer		SD	2.15	2.36	1.68	3.61	2.57	3.30			
Associate	43	M	41.21	40.98	40.42	40.95	40.58	40.00			
Professor		SD	3.53	3.56	3.12	2.83	2.98	3.24			
Professor	24	M	42.75	42.25	42.62	43.46	42.75	41.54			
110103501	24	SD	4.47	4.94	4.30	4.15	4.01	4.28			
Total	200	M	41.04	41.10	40.93	41.16	41.05	40.28			
10141	200	SD	3.66	3.66	3.38	3.63	3.49	3.70			

Note:

D1= Acceptance on lesson study D2= Understanding lesson study

D3= Collaboration in lesson study D4= Professional development through lesson study

D5= Effectiveness of lesson study D6= Practical implementation of lesson study

To describe the significant difference in the various dimensions in terms of designation, the collected data were analyzed by using ANOVA (See Table 7).

Table 7 ANOVA Results of the Attitudes of Teacher Educators towards Lesson Study Used in Education Degree Colleges in terms of Designation

No.	Dimension	Designation	Sum of Square	df	Mean of Square	F	Sig.
		Between Groups	144.852	4	36.213	2.808	.027*
1	Acceptance on Lesson Study	Within Groups	2514.828	195	12.897		
		Total	2659.680	199			
		Between Groups	91.671	4	22.918	1.738	.143
2	Understanding Lesson Study	Within Groups	2571.124	195	13.185		(ns)
	Study	Total	2662.795	199			
		Between Groups	115.751	4	28.938	2.616	.037*
3 Collaboration in Les Study	Collaboration in Lesson	Within Groups	2157.269	195	11.063		
	Study	Total	2273.020	199			
	Professional 4 Development through	Between Groups	263.504	4	65.876	5.435	.000***
4		Within Groups	2363.376	195	12.120		
	Lesson Study	Total	2626.880	199			
		Between Groups	118.512	4	29.628	2.500	.044*
5	Effectiveness of Lesson Study	Within Groups	2310.988	195	11.851		
	Study	Total	2429.500	199			
		Between Groups	77.145	4	19.286	1.423	.228
6	Practical Implementation of Lesson Study	Within Groups	2643.610	195	13.557		(ns)
	of Lesson Study	Total	2720.755	199			
		Between Groups	4405.928	4	1101.48	3.160	.015*
	Total	Within Groups	67979.092	195	348.611		
		Total	72385.020	199			

Note. *p < .05, ** \overline{p} < .001, ns = not significant

Based on Table 7, there was a significant difference in the attitudes of teacher educators towards lesson study used in Education Degree Colleges in terms of designation F (4,195) = 3.160, p< .05. However, there was no significant difference in the attitudes of teacher educators towards lesson study in the dimensions of; understanding lesson study and practical implementation of lesson study due to their designation. It can be interpreted that the attitudes of teacher educators towards lesson study differed in the dimensions of acceptance on lesson study, collaboration in lesson study, professional development through lesson study, and effectiveness of lesson study according to their designation. The attitudes were nearly the same in the dimension of understanding about lesson study and practical implementation of lesson study due to their designation. Therefore, to be clear, Post-Hoc test was executed by Tukey HSD method.

Table 8 The Results of Tukey (HSD) Multiple Comparison for the Attitudes of Teacher Educators towards Lesson Study used in Education Degree Colleges in terms of Designation

Dependent Variable	(I) Designation	(J) Designation	Mean Difference (I-J)	Sig.
Attitudes	Tutor (T)	Assistant Lecturer (AL)	7.218	.198
towards		Lecturer (L)	8.124	.808
Lesson Study		Associate Professor (AP)	3.699	.847
Study		Professor (P)	-7.537	.436
	Assistant Lecturer	Tutor (T)	-7.218	.198
	(AL)	Lecturer (L)	.906	1.000
		Associate Professor (AP)	-3.519	.882
		Professor (P)	-14.754*	.012*
	Lecturer (L)	Tutor (T)	-8.124	.808
		Assistant Lecturer (AL)	906	1.000
		Associate Professor (AP)	-4.425	.978
		Professor (P)	-15.661	.293
	Associate Professor	Tutor (T)	-3.699	.847
	(AP)	Assistant Lecturer (AL)	3.519	.882
		Lecturer (L)	4.425	.978
		Professor (P)	-11.235	.130
	Professor (P)	Tutor (T)	7.537	.436
		Assistant Lecturer (AL)	14.754*	.012*
		Lecturer (L)	15.661	.293
		Associate Professor (AP)	11.235	.130

Note. *p < .05

Table 8 indicated that a significant difference was found between Assistant Lecturer and Professor are in the designation at .05 level. So, it can be interpreted that teacher educators who are Assistant Lecturers had different attitudes from the teacher educators who are Professors. It may be due to the fact that Professors had more teaching experience and practice in lesson study than Assistant Lecturers.

Findings of Responses to Open-ended Questions

Four open-ended questions were asked to obtain more information from the participants. By exploring the participants' attitudes, the researcher was better at tailoring advice and information sharing. In addition, open-ended questions allow participants to explore the personal reason for making positive changes in their attitudes and how to go about making those changes. Within the following four open-ended questions, participants answered these questions according to their thoughts, beliefs, and feelings. The study briefly presented the feelings of their answers in the following.

1. How frequently do teacher educators practice lesson study activities in their teaching? (1. Daily 2. Once a weak 3. Once per month 4. Once per Academic Year 5. Never Practice it)

According to the responses of teacher educators selected from Education Degree Colleges on the frequency of practicing in lesson study, 44% of teacher educators (88 out of 200 teacher educators) indicated that they practiced lesson study activities once per month, 46.5 % of teacher educators (93 out of 200 teacher educators) indicated that they practiced it once per academic year

and 9.5% of teacher educators (19 out of 200 teacher educators) indicated that they have never practiced it.

2. State the effectiveness of lesson study for students.

Most of teacher educators (187 out of 200 teacher educators) answered the effectiveness of lesson study for students as follows:

- Students can get positive outcomes.
- Students engage in lessons and units as active participants.
- Students can understand lessons easily.

3. Describe the effectiveness of lesson study for teachers.

Almost all teacher educators (195 out of 200 teacher educators) described the effectiveness of lesson study for teachers as follows:

- Lesson study improves the quality of learning for educators to become professional educators.
- Lesson study provides to deepen subject-matter knowledge.
- Teacher educators can get a better collaboration through lesson study.

4. As a teacher, describe what might be the challenges in implementing the lesson study process.

Some of the teacher educators (175 out of 200 teacher educators) answered the challenges in implementing the lesson study as follows:

- Teacher educators need sufficient time and support to be able to plan together and collaborate so they can implement the lesson study regularly.
- They face difficulties to change their professional beliefs.

Discussion, Suggestions and Conclusion

Discussion

This study is to investigate the attitudes of teacher educators towards lesson study used in Education Degree Colleges. According to the literature survey, lesson study is a method of improving teaching and learning for students and teachers. Gunawan (2017) stated that lesson study is a collaborative activity of lecturers designing learning and evaluating the success of teaching strategies to improve the quality of the learning process and student learning outcomes. The idea of lesson study is simple: collaborating with fellow teachers to plan, observe and reflect on lessons. Developing a lesson study, however, is a more complex process.

For the current study, two research questions were investigated. The first research question was "How do teacher educators consider lesson study used in Education Degree Colleges?" And the second research question was "How do the attitudes of teacher educators towards lesson study differ in terms of teaching services, qualification, and designation?".

According to the results of each dimension, teacher educators in Education Degree Colleges in Magway Region and Mandalay Region had positive attitudes towards lesson study. It is supposed that they accepted that they can develop better procedures for learning through lesson study. However, the required main points and practices of lesson study for the development of teachers' skills in understanding and observing classroom practices are still unknown. To be successful teaching, they have to implement lesson study in an effective way.

Tachie (2020) explored teacher attitudes towards lesson study. He pointed out that lesson study was carried out as a professional way of planning -through a positive attitude, dedication, and commitment as a group with one common idea.

Based on the comparison of mean of the attitudes of teacher educators towards lesson study in terms of teaching services, qualification and designation, there was no significant difference in the attitudes of teacher educators towards lesson study in terms of teaching services and qualification. Therefore, the attitudes of teacher educators towards lesson study did not directly affect the teaching services and their qualifications.

On the other hand, there was a significant difference in the attitudes of teacher educators towards lesson study in terms of designation except for the dimension of understanding about lesson study implementation of lesson study. Thus, the designation of teacher educators affects on the attitudes of teacher educators towards lesson study.

According to the responses of opening-ended questions, lesson study provides the benefits for teacher educators; the quality of learning to become professional educators, deep subject matter knowledge, and better collaboration. On the other hand, the students engage lesson as active participants so that they can understand their lesson easily and they can get positive learning outcomes. In the practice of lesson study, teacher educators faced the challenges such as insufficient time, support, instructional materials, and collaboration to be able to plan and implement lesson study together. For that reason, it was the weak practice of lesson study in selected Education Degree Colleges. As the consequence, teacher educators did not get the rich experience and knowledge of lesson study. Therefore, teacher educators should practice lesson study regularly and systematically. The principals should encourage them to involve actively in conducting lesson study and support adequately.

Suggestions

The current study explored the attitudes of teacher educators towards lesson study used in Education Degree Colleges. It was found that almost all teacher educators' attitudes had good in the lesson study process. Lesson study increases teaching confidence and had direct benefits for student learning through collaboration with colleagues. Moreover, the implication of lesson study is the formation of study groups as a place for sharing and discussion about teaching and learning. Therefore, teacher educators should follow the suggestions to develop the quality of teaching. Teacher educators should involve in the process of lesson study effectively. They should create supportive relationships among the team members for dialogue, analysis, and critique through lesson study. This study emphasized only the attitudes of teacher educators towards lesson study used in Education Degree Colleges from Magway Region and Mandalay Region. To obtain more valid findings, the research study should be expanded to other Education Degree Colleges in Myanmar. Moreover, research is an unending process and every research work provides clues for further investigation. Therefore, further studies should focus on learners for their achievement. The following further investigations may be based on the results of this study. With this view, some recommendations were provided for further research.

- 1. Lesson study should be one of the regular in-service training in teacher education programs.
- 2. It is recommended that educational stakeholders should be actively involved in the organizational structures that support teachers' effective participation in lesson study. This may contribute enhancing teachers' knowledge and practice, enabling learners to achieve in the teaching learning process.
- 3. This study contained survey data only. Further research should be conducted in qualitative research. From the results of the study, the next study should be done to meet the possible needs in the implementation of lesson study for the professional development of teacher educators.

Conclusion

To develop the profession of teaching, teacher educators have to implement lesson study as it plays an essential role in the quality of the teaching and learning process for the professional development of the teacher. The teacher educators acknowledged that lesson study helped them develop the teaching profession and know students' needs, and conduct the best approach in shaping students' character.

Therefore, this study is hoped to be helpful for teacher educators as well as administrators by providing the results regarding the attitudes of teacher educators towards lesson study used in Education Degree Colleges. Based on the findings of the study, they will become aware of teacher educators' professional development in the teaching learning process. The findings of this study are also applicable to teachers, administrators, and educational stakeholders and provide some support for further implementation of lesson study in teacher education. The lesson study approach permits teachers involved in professional development to become as active in their learning as they expect their students to be. By creating a supportive, meaningful, enjoyable, and effective learning environment or opportunities for teacher educators, they can be improved their professional development. This study will give guidelines for teacher educators to conduct a better and more effective teaching learning process so that students will achieve purposeful learning. Moreover, this study will provide bases for further research studies in the area of the lesson study process.

Acknowledgements

First of all, I am deeply grateful to Dr. Myat Myat Thaw (Pro-Rector, Sagaing University of Education) who allowed me to do this research. Then, I would like to express our honorable thanks to Prof. Dr Wai Wai Oo (Head of Curriculum and Methodology Department) and Dr. Soe Than (Retierd Professor, Head of Curriculum and Methodology Department) for their invaluable instructions. I would like to express the deepest appreciation to my supervisor, Daw Soe Soe Thein (Associate Professor) for her excellent support, and valuable advice to complete this research successfully.

References

- Bjuland, R., & Mosvold, R. (2015). Lesson study in teacher education: Learning from a challenging case. Teaching and Teacher Education, 52, 83–90. doi: 10.1016/j.tate.2015.09.005
- Cajkler, W., Wood, P., Norton, J., & Pedder, D. (2013). Lesson study: Towards a collaborative approach to learning in initial teacher education? Cambridge Journal of Education, 43(4), 537-554. doi: 10.1080/0305764x. 2013.834037
- Copriady, J. (2013). The implementation of lesson study programme for developing professionalism in teaching profession. Asian Social Science, 9(12), 176-186. doi: 10.5539/ass. v9n12p176
- Gunawan, I. (2017). The application of instructional management-based lesson study and its impact with student learning. Advances in Economics, Business and Management Research, 45, 1-9.
- Haghighiford, M., & Marzbon, A. (2016). Teachers' View Point on Practical Implementation of Lesson Study in EFL Classroom. International Journal of Humanities and Cultural Studies 3(2), 13-14. Retrieved from http://www.ijhcs.com/index.php/ijcs/index
- Lunenberg, M., Dengerink, J., & Korthagen, F. (2014). The professional teacher educator: Roles, behaviour, and professional development of Teacher Educators. The Netherlands. Sense Publishers.
- Murata, A. (2011). Introduction: Conceptual Overview of lesson study. In L. C. Hart, A. S. Alston, & A, Murata (Eds.), Lesson Study Research and Practice in Mathematics Education: Learning together (pp. 1-12). Landon: Springer. doi: 10.1007/978-90-481-9941-9
- Podhorsky, C., & Fisher, D. (2007). Lesson study: An opportunity for teacher led professional development. In T. Townsend, & R. Bates (Eds.), Handbooks of teacher education: Globalization, standards and professionalism in times of change (pp.445-455). Netherlands: Springer.

- Project for Strengthening Child-Centered Approach (SCCA). (2011). Handbook of Lesson Study: how can we practice the lesson study at EC?: Pre-service component of SCCA 2. Department of Planning and Training, MOE & JICA.
- Robbins, S. P., & Judge, T. A. (2013). Attitudes and job satisfaction. In J. Leale (Ed.), Organizational behavior (15th ed.). (pp.70-71). New Jersey: Pearson.
- Tachie, S. A. (2020). Teachers' Attitudes towards Lesson Study as a Viable Strategy to Improve the Teaching and Learning of Mathematics. Universal Journal of Educational Research, 8(6), 2326-2334, Retrieved from
- https://www.researchgate.net/publication/341902225
- Takahashi, A., & McDougal, T. (2016). Collaborative lesson research: Maximizing the impact of lesson study. The International Journal on Mathematics Education, 48(4), 513-526. doi: 10.1007/s11858-015-0752-x
- Willems, I., & Bossche, P. V. D. (2019). Lesson Study effectiveness for teachers' professional learning: a best evidence synthesis. International Journal for Lesson and Learning Studies. 13, 83-111. doi: 10.1108/IJLLS-04-2019-0031
- Wright, T. D. (2009). Investigating teachers' perspectives on the impact of the lesson study process on their mathematical content knowledge, pedagogical knowledge, and the potential for student achievement. (Doctoral Thesis, University of New Orleans, Louisiana.) Retrieved from https://scholarworks.uno. edu/td/906