Elevating Lesson Study (LS) Quality in Indonesian Higher Education: An Evaluation of Results

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Abstract: This study aims to evaluate the implementation of the LS program at university level. The results of the evaluation can be used to revise and improve the quality of the LS, especially the quality of learning and professionalism of lecturers. Evaluative research was used to analyses the implementation of the LS as a whole, starting from aspects of context, input, process, and output: by conducting interviews with the Dean of Teacher Training and Education Faculty (TTEF) and the Head of the English Education Study Program (EESP), by giving an open questionnaire to 16 lecturers and 45 students, and by identifying the video recording learning process. Based on the criteria for the success of the LS, the results of the evaluation show that the implementation of the LS has not fully achieved its maximum potential, there are several weaknesses related to the process and output aspects, such as the lack of consistency and commitment of lecturers as observers. The quality of learning has been found to be in the process of improving. The results of this evaluation become a practical guidance to the university stakeholders in order to develop the implementation of the LS program to deliver better quality in the future. Comprehensive analysis on four aspects of the implementation of the LS with reference to the program success criteria as a guideline and basis for determining the results of evaluation of LS implementation in all tertiary institutions

Keywords: Evaluation Results, LS Quality, English Education, Professional Development

1. Introduction

The lesson study learning program (LS) is a model of teaching professional development to build a learning community, through collaborative and continuous learning studies, based on the principles of collegiality and mutual participation in the learning process. The idea contained in the program is that when lecturers want to improve learning, one of the best ways is to collaborate with other teachers to design, observe, and reflect on the learning that is being carried out (Lewis, 2002). The characteristics of the lesson study program are: professional development, learning assessments, collaboration, sustainability, collegiality, mutual learning, and a learning community.

This study evaluates the implementation of the lesson study program at university level, to find out whether the program is successful in improving the quality of learning and the professionalism of lecturers or if it needs to implement improvements. This study focuses on the condition of the aspects being evaluated: context, input, process, and output. Every aspect has predefined success criteria. Each aspect has components that are evaluated, then applied to the criteria for measuring success of the lesson study program in Indonesian universities. These success criteria were compiled and validated by several lesson study experts and then used as references to determine the success of each component.

Lesson study programs have been carried out and disseminated in several universities in Indonesia. In 2013, the English Education Study Program (EESP) implemented the lesson study program as a forum for learning assessment to improve the quality of learning and the professionalism of lecturers. LS is defined as a hallmark of superiority in the Teacher Training and Education Faculty (TTEF) and it is also in line with the vision and mission of the faculty and study program. Why apply lesson study? Dudley (2015) states that LS is not a learning method or strategy, but lesson study activities can apply various learning methods and strategies according to the situations, conditions, and problems faced by lecturers.

The application of LS is expected to improve the quality of learning and the professionalism of lecturers. The results of research conducted by Calvo, *et al* (2018) explain that there is the potential for LS to develop lecturer professionalism at higher education levels and answer questions about problems regarding collaborative learning practices. LS can also add insight into lecturers' professionalism and create learning innovations by a collegial approach. LS is an approach used in the teaching process to improve the quality of learning and learning outcomes in the school context and can increase professionalism in a sustainable manner. Dudley (2012) states that LS is an approach used by lecturers that can improve teaching and learning outcomes in the school context and can increase

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professional knowledge on an ongoing basis. Wood and Cajkler (2016) also explain that the lesson study has the potential to act as a framework for reflecting on and developing pedagogic practice in the university sector. It can form a positive methodology for extending the work of scholarly teaching and learning.

Cheung and Wong (2014) in "Does Lesson Study Work?" explain that there were several benefits found from implementing lesson study from 2000 to 2010 in several countries, such as Hong Kong, China, USA, Japan. The implementation of lesson study can be viewed as the relationship between the teacher and the classroom, including the process of collaboration, reflection, and professional development. Fernandez (2010) maintains that active learning among teachers involves a meaningful discussion and this is one of the important topics in professional development in the LS model. Murata and Takahashi (2002) argue that a continuous reflection process is the most important aspect of professional development. From some explanations of the results of research already done, it can be stated that the lesson study program creates a positive experience of improving learning and has the potential to increase the professionalism of lecturers in higher education.

During the process of monitoring the learning program in the English Language Education Study Program, problems or shortcomings were found regarding the learning program through LS. These included the involvement of lecturers, especially observer lecturers, who do not fully play an active role in lesson study activities, evidenced by the attendance list at each stage of lesson study activities. An explanation was also given by the Dean of TTEF of how, in the first year, there were many lecturers who did not understand how to apply lesson study to the concept of collaboration in their effective subjects. Therefore, various workshops and mentoring activities were held to provide an understanding of how to implement the lesson study program for lecturers within the faculty and study programs.

Evaluation research is deemed necessary for the implementation of the LS program in the English Education Study Program. With the evaluation being carried out, deficiencies or problems, in terms of its implementation, can be found and revised further. The Government Social Research Unit (2007) explains that evaluation research is used to identify the effectiveness of a policy, program, or project systematically with the aim of showing progress or development in the social aspects of people's lives. Evaluation research was also conducted by Ylonen and Norwich (2013) regarding the professionalism of teachers in carrying out learning through LS in England. Stufflebeam and Shinkfild (2007) defines how evaluation should assess and report an entity merit, worth, probity, and significance, and should also present lessons learnt from the program. This explanation reinforces the reasons why the lesson study program should be evaluated.

2. Materials and methods

This type of research is called program evaluation research, using the Context, Input, Process, Product (CIPP) model developed by Stufflebeam. This evaluation research leads to results (outputs) related to the implementation of the LS program, but the three other components, such as context, input, and product are interrelated and have an influence in determining the value of an output based on predetermined criteria. Stufflebeam and Shinkfild (2007) explains how the model is based on the view that the most important purpose of evaluation is not to prove, but to improve. The data that has been collected for our study was analyzed qualitatively. Sources of data in this study are parties involved in lesson study activities, including the Dean of the TTEF, the Head of the English Education Study Program, lecturers in the English Language Education Study Program, and students. Lecturers consisted of model lecturers and observer lecturers, while students were respondents in the fifth semester. Data from interviews, video recording observations, and questionnaires are presented, then applied to the standard evaluation criteria and used as a basis for making decisions/judging quality.

3. Results and discussion

1.1. Context (Policy and Goals)

The research results are shown in the following table:

Table 4.1.1. Evaluation Results of Context (Policy)

Successful Criteria	Data	Judgment
There is a juridical foundation that supports the implementation of the LS in higher education, namely in the form of laws and government regulations on education.	LS is a 2013-2015 project; the implementation is still well implemented in TTEF. The implementation of the LS program is in accordance with the juridical basis, namely Law No. 14 of 2005 on teachers and lecturers and Government	• The LS program is implemented at Cokroaminoto Palopo University, the Faculty of Teacher Training and Education. The EESP Program has a juridical

 The existence of policies in 	Regulation no. 19 of 2005 on National	foundation in accordance
higher education in the form of rules	Education Standards. The LS	with laws and policies in
in accordance with the	implementation guidelines also refer	accordance with the TTEF
implementation of the LS such as the	to the Guidebook 1 - 4 published by	vision and mission.
suitability of vision, mission and	Belmawa Dikti.	
goals.		

All data was obtained from the results of document studies and interviews at the EESP and TTEF. Within the basic and policy components, findings show that the juridical basis refers to Law No. 14 of 2005 concerning teachers and lecturers, namely in Chapter I General Provisions Article 1 paragraph (14) and (2) which states that: (14) Educational personnel education institutions are tertiary institutions that are assigned the task by the Government to organize teacher procurement programs in children's education early age through formal education, basic education, and / or secondary education, as well as to organize and develop educational and non-educational sciences. (2) Lecturers are professional educators and scientists with the main task of transforming, developing and disseminating science, technology and arts through education, research and community service.

The existence of this juridical basis is because educational institutions such as universities are tasked by the Government to develop education by implementing various programs that support learning. Lecturers are also obliged to develop and disseminate their knowledge through learning activities implemented by the university. The Dean of TETF also states that:

In the aspect of the foundation of the lesson study program as a reference in its implementation, the relevant juridical foundation is Law No. 14 of 2005 concerning teachers and lecturers, namely teachers are expected to be professional educators, and PP No. 19 of 2005, concerning the National Education Standards. (Junaid, July 2019).

Apart from Law Number 14 of 2005, the juridical basis for implementing the LS program also refers to Government Regulation Number 19 of 2005 concerning National Education Standards (SNP). Several articles and paragraphs are in accordance with Article 19 which explains that; the learning process in educational units is carried out in an interactive, inspiring, fun, challenging way, motivating students to actively participate, and provides sufficient space for initiative, creativity and independence according to the talents, interests, physical and psychological development of students. Each education unit plans the learning, the implementation of the learning process, the assessment of learning outcomes and the supervision of the process for the implementation of an effective and efficient learning experience. It is explained that the Government Regulation is intended to spur education managers, administrators and units to improve their performance in providing quality education services, as well as software to promote transparency and public accountability in the administration of the national education system. The LS program policies are also based on guidebooks 1–4 published by the Director General of Belmawa Dikti which regulates guidelines for proposal preparation, implementation, assistance, monitoring and evaluation guidelines. The Dean of the TTEF in an interview regarding the concept of implementing LS, stated that:

The LS concept works well, because it is in line with its objectives. LS is a 2013-2015 project. LS is still implemented in TTEF because of a policy and creates sustainability. The initial guidelines for LS refer to books published by Belmawa Dikti, namely books 1, 2, 3, and 4. (Junaid, July 2019).

Regarding program objectives, LS has the same goals as the objectives of the TTEF and the EESP. The evaluation results are shown below:

Table 4.1.2. Evaluation Results of Context (Goals)

Successful Criteria	Data	Judgment

- There is a college goal to solve problems in learning.
- There are higher education goals to improve the professionalism of lecturers and the quality of learning.
- There is a goal to improve collegiality, create learning innovations.
- The TTEF objectives are similar to those of LS, namely, to create professional educators.
- The objectives of the English Language Education Study Program can be achieved by implementing LS. By applying LS, students will find ideas including learning methods, and achieve the goal of producing skilled educators.
- The application of LS creates a collegial process between lecturers and fosters their creativity of lecturers in applying innovative learning models.
- The lesson study program has objectives that are in line with the TTEF objectives, especially in the EESP therefore it can be applied to the learning process.

The results of decisions regarding the evaluation of program objectives are determined by several data, namely those sourced from the guidebook document 2 (two) LS documents, strategic faculty plans (Renstra), study programs and the results of interviews with the Dean of the TTEF and the Head of the EESP. The data in book 2 (two) *Guidelines for the Implementation of Lesson Study* (2010) states that the objective of LS is to carry out the training of the teaching profession on an ongoing basis, therefore there should be continuous improvement in the professionalism of educators. The objectives of the TTEF lesson study program, and the EESP are similar, both related to improving the continuous quality of learning and professionalism of lecturers, as well as producing quality educators and educational staff. This was reinforced by the response of the Dean from an interview:

The vision of TTEF is to become an excellent institution nationally in creating resources that are noble, intelligent, and professional, and are related to the LS goal, namely professionalism to create professional educators. (Junaid, July 2019).

The Head of the English Education Study Program added the following:

The vision of the EESP is to produce skilled and professional educators. This vision can be achieved by implementing LS, with the hope that prospective teachers or students and educators can find ideas or methods. LS can help achieve the goals of a skilled educator in the end. (Ramadhana, July 2019).

It can be concluded that the suitability of the lesson study program goals with the added objectives, vision, and mission of the faculty and the Study Program is clear.

4.2. Input (Lecturers' Conditions and Learning Devices)

Stufflebeam and Shinkfild (2007) define input evaluation as an assessment of competing strategy and work plans of the selected approaches. Furthermore, Firman (2008) explains that input evaluation focuses on gathering important input information, such as student profiles (including learning capacity, motivation level and learning achievement), lecturer profiles (including educational background and teaching experience, attitudes towards innovation, work culture), as well as the learning facilities available on campus. The results are as follows:

Table 4.2.1. Evaluation Results of Input (Lecturers' Conditions)

- Lecturers have teaching experience and have S3 and minimum S2 qualifications.
 Lecturers have
- Lecturers have competency expertise in accordance with the subject area being handled.
- Lecturers have a work ethic, a positive attitude towards innovation, and have good collegiality in implementing learning.
- Qualifications held by lecturers of EESP is S2 and there are some doctoral degrees that are in accordance with their field of knowledge.
- All lecturers have teaching experience. The educational qualifications and teaching experience possessed by the lecturers are above the standard, or above 90%.
- All lecturers have a good work ethic and performance. They are innovative in applications to the learning process.
- Lecturers in the English Education Study
 Program have 100% lecturer qualifications. Lecturers have a good work ethic, show innovation, have a positive attitude.

Under the component of lecturer conditions (qualifications and experience), it is known that all lecturers at the faculty and study program already have lecturer qualification standards, namely a minimum education of S2 and several lecturers have doctoral education qualifications. Lecturers in the EESP have also had sufficient experience in teaching based on their field. The data was obtained through interviews with the Head of the EESP, who said:

The qualifications that all lecturers have are standard, all have at least a master's education. Most of the lecturers already have teaching experience in various fields of education, and there are also a few who are new to the world of education. When it is judged that they are above 90% have experience in managing classes and dealing with teaching. (Ramadhana, July 2019).

Results of the analysis show that the qualifications of lecturers in the TTEF and EESP have met the standards or can be said to be at the expected 100%. The lecturers all have required teaching experience, especially those who are lecturers in the EESP; around 90% of the lecturers have gained experience in teaching and managing the learning process. In addition to qualifications and teaching experience, lecturers must also have a work ethic and show innovation and creativity.

This study is in line with the statement put forward by Firman (2008) that the input components evaluated include the conditions and qualifications of lecturers, student conditions, and learning tools. According to Law Number 14 of 2005, concerning teachers and lecturers' conditions and qualifications in chapter V, the first part of Article 46 paragraph (2) explains that lecturers must have a minimum academic qualification from a master's program to teach a diploma or undergraduate program; and must have graduate doctoral programs for postgraduate programs. Regarding input evaluation, the lecturers in TTEF and the EESP in particular, have met the qualification standards, have good teaching experience, have a work ethic and show innovation towards teaching.

The learning tools used in the lesson study program have been referred to in these government regulations. The results are shown below:

Table 4.2.2. Evaluation Results of Input (Learning Devices)

Successful Criteria	Data	Judgment
The existence of learning devices in accordance with national	Learning tools are available in the EESP in	The existence of learning devices in
higher education standards which	accordance with existing	accordance with national
include: (1). syllabus; KI / KD,	standards. The learning device that	higher education standards.
subject matter, learning steps, time	is owned is different from the LS	
allocation, evaluation, learning resources and media	learning device model, which has	
(2). lesson plan; learning	chapters and design lessons, but the content is the same, which	
objectives, learning materials,	describes the learning process.	
learning methods, stages of the		

learning process, learning media, worksheets, and evaluation.	

It is explained that this component is the most important part of the learning process because the learning device takes place by a lecturer in the preparation stage before learning and it becomes a guide that will be used in systematic learning activities with the aim of achieving learning targets. The Dean of the TTEF, stated that, related to learning devices at the faculty, especially in the study program:

In general, TTEF has existing learning tools. The LS learning tool has a different design chapter, which describes the learning process from start to finish. The learning tools consist of design chapters and design lessons, which describe the understanding process to students. (Junaid, July 2019).

In connection with learning tools, there are different formats used in the lesson study, but the parts of the learning tools remain the same and follow the standard of learning tools in general. Referring to the research problem, it can be stated that the input evaluation is fulfils the requirements and success criteria.

4.3. Process (Plan, Do, See)

Process evaluation is carried out on the implementation of the LS program with the aim of reviewing how far each stage of the lesson study activities carried out meets the predetermined success criteria. Process evaluation monitoring, documents, and assessment program activities, according to Stufflebeam and Shinkfild (2007) are evaluator activities where a team member is engaged to monitor, observe, maintain, photograph records of, and provide periodic progress reports on program implementation. Interviews with parties related to the implementation of the lesson study program were conducted thoroughly to determine the successes and shortcomings found at each stage. According to Stufflebeam & Shinkfild (2007), Yoshida and Fernandez (2012) one of important purposes of participating in the LS process and its professional learning communities is to assist teachers to become life-long learners. It is clarified that it is not easy task and requires that participants are aware of the purpose, challenge, and the commitment needed to make LS successful and effective (Yoshida and Fernandez, 2012).

Firstly, to evaluate the planning stage (plan) Hendayana, et al (2006) states that the stages of the plan begin by identifying learning problems, including teaching materials and learning strategies. At the analysis stage, it is necessary to consider the depth to be taught in terms of the demands of the curriculum, background knowledge, and student abilities. At this stage, the model lecturer explains the learning scenario that has been prepared and will then be applied to the 'do' (implementation) process. After the explanation is given by the model lecturer, a discussion is held between the model lecturer and the observer regarding the learning activities to be applied. The observer provides input or comments regarding the scenario described. In this planning activity, collaborative and collegial activities occur between model lecturers and observers. The results of the plan evaluation are as follows:

Table 4.3.1. Evaluation Results of Process (Plan)

Successful Criteria	Data	Judgment
 The model lecturer's readiness in preparing learning activities in the form of learning tools. There is the involvement of all lecturers in discussing and arranging learning activities. 	The planning process that is carried out involves lecturers in faculty and study program, but not fully maximized as expected, the problem is the lack of commitment of lecturers as observers. Engaged, but not fully active. Lecturers (models) prepare learning materials to be discussed at the plan stage, lecturers provide suggestions	The planning process is carried out in the study program, model lecturers are fully involved, but there are some lecturers who are not fully active.

and comments on learning materials.	

At the planning stage (plan), the head of the EESP provides an explanation through interviews conducted, as follows:

Lecturers actively prepare learning materials, when there is no meeting, the lecturer holds a meeting to discuss the plan. Lecturers provide suggestions, input, criticism on the plan, to see whether it will be implemented later or not, or need to be replaced with other alternatives. (Ramadhana, July 2019).

The same statement was also given by the lecturers of the EESP through an open questionnaire. The results of an open questionnaire asking about how to plan learning in the subjects being taught are as follows:

Yes, learning planning is done by compiling lesson plans for one course, then inviting fellow lecturers to discuss the lesson plans. The end result is a revised lesson plan which I can then use for the learning process. Patang, July 2019)

Yes, especially in learning English Learning Models, and teaching LS to students. Planning starts from making a chapter design, chart of LS, and pouring it into a lesson plan, and is done together with colleagues in the process (plan, do, see). (Suardi, July 2019).

In taught courses, some lecturers have used lesson study and in the planning process other lecturers have shown their collegiality through discussions and designing collaborative learning. The Dean decided that one day would be LS day, namely Thursday, where all lecturers who did not have a teaching schedule were encouraged to be observers in the lecturer class that carried out LS. The model lecturer and observers also demonstrated collaborative processes in each cycle of the plan activity. From the data analysed, the activities of model and observer lecturers show that there is success in planning activities, although not at full realisation because the number of observer lecturers is still limited. Of all the data, it can be concluded that the stages of the plan activities have met some of the criteria for success, although not fully.

Secondly, the monitoring stage. According to Firman (2008) the evaluation at the 'do' stage aims to determine the successes and weaknesses, both implementation of learning and of lesson study activities as a whole. Consolidated information from the results of the entire series of monitoring activities is then conveyed as feedback to management for program formative evaluation purposes. At the do stage, it is implemented by applying all scenarios that have been prepared by the model lecturers and observers, as a result of discussion of the learning activities to be carried out. The following are the results of the do stage evaluation:

Table 4.3.2. Evaluation Results of Process (Do)

Successful Criteria	Data	Judgment
 The implementation of lesson plans (lesson design) in the learning process. There is a collaboration that occurs in learning activities between lecturers and students, students and students. The observer is actively involved in making observations. 	 Learning is carried out in accordance with the plan prepared, the observer makes observations during the open class, and the model lecturer evaluates the input given by the observer lecturer. As it appears, some are appropriate, meaning that when a lecturer has three learning objectives at one meeting, sometimes only two are achieved due to impossible conditions. The learning media, as a basic tool, is prepared by the lecturer even if there is no specific activity, as media. 	The do process carried out in learning shows that there is collaboration, but it is not optimal because there are some observer lecturers who are not fully involved.

Based on the interview data analysed, the Head of the EESP stated that the observation section has been a constraint in implementation so far, because compared to other processes, for example, planning, observation takes longer, because it is in accordance with the lesson hours. This is the problem, because not all lecturers can be fully present at that time. It is rare for a lecturer to make complete observations, no more than two lecturers observe from beginning to end of a class. Results of open questionnaires show that several lecturers noted the same obstacles as the head of the study program. The observation process carried out by observer lecturers was not carried out optimally because not all lecturers participated fully in the process. According to Musliadi (July, 2019), colleagues (observers) help in the planning process until it is completed, but sometimes it is very difficult to bring in lecturers (observers) at the do stage, because they are constrained by the same timetabled schedule. It can be said that the participation of lecturers in observation activities (as an observer) is not carried out thoroughly (optimally), because it was constrained by the lecturers' schedules simultaneous with the do activities.

Furthermore, it was explained how the learning process activities carried out by model lecturers, were completed quite well, but not all the lesson designs, compiled at the plan stage could be implemented properly. This is because the class situation is not running as expected. According to open questionnaire data, Upa (July, 2019) explained that lesson design is sometimes carried out completely and other times it is not, due to class conditions including the allocation of time for students to do assignments. Patang (July, 2019) also stated that learning scenarios (lesson design) were carried out depending on how the class was running. The collaboration that occurs in the learning process carried out by model lecturers, It is carried out well. The evaluation of the process at the monitoring stage (do) was carried out (quite well), but not optimally. The constraints on optimal implementation, of course, become material notes for making revisions at the next stage of carrying out the do process.

Thirdly, the evaluation of the reflection stage (see), is where observers of the learning process in class make notes about all student and lecturer activities and observe whether the lesson which has been designed at the plan stage can be fully implemented. The observer also notes student constraints in learning participation, because this would be input for the model lecturer at the next meeting. The following is the result of the "see" analysis:

Table 4.3.3. Evaluation Results of Process (See)

Successful Criteria	Data	Judgment
There was discussion and feedback from the observer lecturer in the form of improvements to further learning	If reflection is easier, lecturers can gather to discuss more freely in time because they can come together between class hours. Even though it is only a few minutes for reflection, if observations are not complete, the input for reflection is limited. The revisions were applied, there were deficiencies in a particular meeting lesson, then given in reflection stage,	There is a reflection process (see) that is carried out in the study program, but it is not optimal.
	there were efforts to improve.	

The observer provides input to the model lecturers regarding learning that was carried out in class. The model lecturer evaluates the learning process together with the observer, in terms of learning steps, teaching materials, and time allocation for the next meeting. Head of the EESP stated that there were revisions that were implemented and there were deficiencies in the learning process at certain meetings. The reflection process that takes place is a discussion about the learning process, carried out by the model lecturer, the focus of the discussion of which is carried out on student activities based on instructions regarding assignments in class.

4.4. Products (Lecturer Professionalism, Quality of Learning and Sustainability)

Product evaluation includes improving the professionalism of lecturers and the quality of learning, the student abilities, perceptions, and sustainability. In product evaluation, Stufflebeam and Shinkfild (2007) state that its purpose is to measure, interpret, and judge an interviewee's achievements. Its main goal is to ascertain the extent to which the evaluation has met the needs of all the rightful beneficiaries. Scriven (1994) states that the purpose of this product evaluation does not focus on student achievement but focuses on the useful skills, attitudes, knowledge, and abilities which they can apply in society. The results of the analysis of professionalism of lecturers and the quality of learning are as follows:

Table 4.4.1. Evaluation Results of Product (Lecturer Professionalism and Quality of Learning)

The professionalism of the lecturers can be seen by the vigour of the lecturers in	
 There is an increase in the professionalism of lecturers in conducting teaching, research, community service and in collegiality through lesson study. There are articles published on the development of learning through lesson studies conducted by lecturers regularly. There is an increase in the quality of learning in the form of learning innovations using creative learning models. Collegiality in several courses is very helpful, especial 	Education Study Program, in terms of teaching, research, and community service, but no written assessment has been carried out at the Faculty and Study Program levels. The quality of learning leads to better improvements, indicated by the innovation of created learning models and collegiality, though these improvements have not been optimized. Only a few lecturers publish in national journals.

The evaluation results within the table were obtained from interviews with the Head of EESP and the Dean of the TTEF. Apart from structured interviews, open-ended questions in questionnaires were given to lecturers in the EESP, related to the implementation of the lesson study program, based on structured interview data related to improving lecturer professionalism and quality of learning. The Dean of the TTEF said the results of the research generally show that the quality of learning in TTEF can improve by implementing LS but the increase has not been as high as expected. With a continuous annual process, it will get better results. The head of the study program also stated that if it were viewed in terms of learning material, it could be seen that there was an increase in the quality of learning. The learning models that are applied are also the result of modification of existing models, adjusted to class conditions. It can be observed that the increase in lecturer professionalism is not significant overall, but the increase can be seen through the classroom learning process. In addition to the learning process, the professionalism is also seen in the collegiality process, carried out by conducting discussions in determining learning strategies in parallel classes.

The collegiality that is created in the learning environment will have an impact on increasing the professionalism of the lecturers because collegiality will create better quality learning. This is indicated by the collaborative process carried out in designing learning that will be implemented in the course. In learning design, many things are discussed, such as learning methods and strategies, outlined in the lesson design. However, a way to measure the professionalism of lecturers in writing or in administration has not been implemented. The results of the analysis by the evaluators related to lecturers' learning innovations carried out during the learning process, explained that the lecturers had implemented innovations during learning, such as new learning methods which were the result of combining two or three methods, conducting exhibitions in class, and the discovery of the relay teaching method. Implementation of the running dictation method changed to walking dictation. The collegiality process is shown in these activities.

In terms of sustainability, it is explained that lesson study is a model of coaching (training) for the teaching profession through collaborative and continuous learning studies based on the principles of collaboration and mutual learning so that learning communities can be built. The results are shown below:

Table 4.4.2. Evaluation Results of Product (Sustainability)

Successful Criteria	Data	Judgment
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- The creation of a sustainable professional learning community within the scope of study programs and faculties.
- There is expansion (dissemination) of the implementation of lesson study in the scope of partner universities and schools.
- The achievement of the objectives of the LS is not yet at the optimum stage, because the LS is in the process of continuous improvement.
- LS is still being implemented in TTEF as evidenced by the inclusion of LS in the RIP (Research Master Plan). LS sustainability is also demonstrated through LS research conducted by lecturers.
- Efforts at LS sustainability is to apply LS in the learning and research process carried out by lecturers and equip students with LS knowledge in carrying out internships at schools.
- The achievement of the learning community that occurs in study programs and faculties has not been optimal.
- There has been an expansion of LS within the scope of the university and the target schools.

Lesson study is a program that is included in the Faculty Research Master Plan (RIP), therefore lecturers' research in the TTEF is directed towards that which focuses on or relates to the learning process by implementing it. The development of the learning community takes place in a process in the study program within the faculty. The Head of the EESP stated that the sustainability of the lesson study is such that the learning community is on the right track, but it is still in the early stages, and will take maximum effort and active participation from all existing stakeholders, until finally a learning community is created. In terms of creating a learning community, there are efforts by the faculty at disseminating or expanding the implementation of the LS program. The expansion was carried out within the scope of the university, namely in the Faculty of Science and in two Junior High Schools (SMP), namely SMP Negeri 3 Palopo and SMP Cokroaminoto Palopo, which became the target schools. Borko *et al* (2010) considers that lesson study (LS) is one of the most successful models of professional development, as it seems to integrate many features of effective professional development programs. The sustainability of the lesson study program is expected by the Faculty due to the form of a learning community creation process and dissemination which it is still in the development stage.

4. Conclusions

The implementation of the lesson study program was based on the *Guidelines for the Implementation of Lesson Study* published by Belmawa Dikti (2013) and the juridical basis, namely Law No. 14 of 2005 on teachers and lecturers and Government Regulation no. 19 of 2005, concerning National Education Standards, in accordance with the vision and mission of the English Education Study Program and the Faculty of Teacher Training and Education. The objectives of both were in line with the objectives of the lesson study program, namely focusing on improving the quality of learning and the professionalism of lecturers at the University of Cokroaminoto Palopo. The input evaluation consists of the conditions and qualifications of lecturers and learning tools. Based on the results of the evaluation of the aspects of the lecturers' conditions (qualifications and experience) on the TTEF and EESP, it was stated that their qualifications had met the requirements based on Law No. 14 of 2005 articles 45 and 46. It was also concluded that the lecturers had a work ethic, innovation, and positive attitude. All these aspects met the success criteria. The results of the evaluation explain that the learning tools are in accordance with higher education standards and with the established criteria.

Process evaluation consists of: 'plan, do, and see'. The evaluation concluded that the planning process (plan) has been implemented in accordance with the lesson study program procedures and refers to the predetermined success criteria, but in the implementation stage there are still improvements needed, such as greater participation of lecturers. In the process of monitoring (do), according to the evaluative results, there were several obstacles found, such as the lack of involvement of lecturers as observers, lack of coordination in arranging open class schedules so that they coincided with teaching schedules. The implementation procedure in the learning is in accordance with the procedures and success criteria, but still needs to be improved. The evaluation of the reflection process found that the implementation of the activity had met the success criteria, namely the existence of discussion and feedback from observers in the form of further learning improvements. Lecturer observers were seen to provide input and feedback during discussions in reflection activities related to the learning process carried out by the model lecturer. Product evaluation consists of lecturer professionalism and quality of learning and sustainability. Results showed that the overall product implementation of the lesson study program is still not optimal (development in process)

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