The Needs Assessment of Training Course to Enhance the Lesson Study Process for Lecturers of Souphanouvong University, Lao PDR

Thongthiane Vathanavong¹, Angkana Tungkasamit² and Sampan Thinwiangthong³

¹Faculty of Education, Souphanouvong University, Lao PDR
²,³Faculty of Education, Khon Kaen University, Khon Kaen 40002, Thailand

Corresponding author Email: vathanavong@su.edu.la

ABSTRACT

The purposes of this research were: 1) to study the state of the problems of teaching and learning for lecturers; 2) to undertake a needs assessment for training to promote the lesson study process for lecturers; and 3) to compare the state of the problems and the needs assessment for training to promote the lesson study process. The study sample comprised 54 administrators; 167 lecturers and 327 students from six faculties of Souphanouvong University who were selected by stratified random sampling. Mixed methods were used as the research methodology; an Embedded Design was conducted by studying quantitative methods and supplementing with qualitative methods. Research Instruments used to collect the data were a questionnaire and structured interviews. Statistics used included percentage, mean (x̄), standard deviation (S.D.) and Priority Needs Index Modified (PNIModified). T-test and One Way MANOVA was applied. The research results were as follows: 1) The state of the problems of teaching and learning for lecturers, including the overall average, was medium; 2) A needs assessment of training to promote the lesson study process by all groups of the sample was an essential requirement for all items, with the overall average of 0.35; and 3) The state of the problems and needs assessment of training to promote the lesson study process, as classified by samples group, showed no difference in significance except for administrators and lecturers, which was different for the state of the problems at the .05 level of statistical significance.

Keywords: Needs Assessment, Training Course, Lesson Study Process.
1. INTRODUCTION
1.1. Introduction

“Teachers are like second mothers of the nation; teachers are the engineers who shape children's souls”. For a long time, this quote has been used to describe the role of teachers. Therefore, teachers play a crucial role in improving education through their teaching-learning facilitation. As the importance of education is as an instructional activity that takes place between teachers and students, teachers should continually learn and develop themselves in order to provide quality education to learners. Lao’s education in the past was teacher-centered and teachers focused on lecturing. Now and in the future, it is important for them to transition to being facilitators of student-centered learning, to help learners achieve educational outcomes using a range of methodologies and strategies appropriate to each learner. (Buasangthong & Phanhthavong, 2016; Department of Teacher Education, MOES, 2014; Ministry of Education and Sports (MOES), 2018). Therefore, teachers need to develop themselves by undertaking professional development to improve their methods for teaching while also developing learners.

To respond to teachers' competency under the aforementioned framework, the Lao Ministry of Education and Sports (MOES) has formulated a strategic plan for teacher development until 2025, promoting professional training and upgrading knowledge and performance of teachers and personnel in education and sports through the training process. The training is expected to focus on enhancing teachers to be models for student-centered education and promote cooperation with organizations both within and outside the country (Department of Personnel Affairs, MOES, 2020).

However, based on the empirical data of teacher professional development with an emphasis on training to develop teachers' potential in Lao PDR, it was found that specialized teacher training was not yet comprehensive and progressive. Most of the training is conducted under joint projects with foreign aid, international organizations or according to the local budget capabilities. In fact, 52.8% of the in-service teachers have never received any training before. This was followed by 37% who have received training only once a year, and 10.2% who have received more than two training sessions per year. Prior to the implementation of the new curriculum for secondary schools, only 305 teachers had received pre-teaching training and 70% had trained according to local circumstances (Inclusive Education Center, MOES, 2015).

Noticeably, not all teachers have had opportunities to receive professional development training. The training's effectiveness cannot be put into practice in teaching and learning because
the content of the training is not suitable for the current state of each school. The continuous development of the teaching profession has not yet met the actual needs of the teachers who attended the training. Although continuing professional development is defined in teacher standards, the actual implementation has not achieved the set goals. (Department of Personnel Affairs, MOES, 2020).

According to a review of relevant documents and research, as well as empirical data and the researcher's experience as a university lecturer for more than 15 years, the lesson study process is perceived as one way to improve teachers' teaching-learning potential. The process of studying the lesson or studying the classroom is a professional development system that uses the school as the place where teachers should develop from the beginning of their teaching career. An important process is that groups of teachers meet regularly to collectively develop a lesson management plan, create teaching innovations, experiment in the real classroom, and improve learning management plans together. The basic concept of this approach is that the most effective method for improving and developing teaching in the classroom is the development and improvement of lessons in the context of the actual classroom (Inprasitha, 2007). Research on lesson study has also revealed that teachers can jointly develop the teaching and learning process as well as contribute to the development of students' advanced thinking skills, which enables students to gradually develop the learning skills and innovations of the 21st century. In addition, it helps in the design of teaching and learning management, strengthens problem-solving skills in classrooms, and fosters creativity and innovation skills. (Inprasitha, 2009; Inthawongsa, 2017; Saosing, 2014; Bayram & Bikmaz, 2018; and Shingphachanh, 2020).

For lesson study to be effective, it is important to use professional development training to increase the potential of teaching and learning management. Such training can help the participants develop knowledge, expertise, and positive attitudes toward the content delivered. This will enable the trainees to learn or change their behavior in accordance with the objectives of training effectively and efficiently. It also helps to enhance positive behavior, actions, and expression, which enables people to think and do what is right and good to encourage people to live together in society peacefully (Chintatiyo et al, 2017). Training is a process that will enhance trainees' knowledge, understanding, skills, and positive attitudes towards a subject or change behavior according to the objective of the training. Hence, in order to develop training course to match the current situation at Souphanouvong University, assessing training needs is a
necessary process in order to analyze the exact needs and priorities of training requirements (Sararatana, 2010).

Based on the importance and problems related to teaching and learning as mentioned, the researchers are interested in the assessment of training needs in order to promote the process of lesson study for Souphanouvong University lecturers. By conducting such an analysis, it will be possible to determine exactly what the real needs are and the priorities for training, and to use the results to develop training course to enhance the lesson study process at Souphanouvong University.

1.2. Research questions

The Needs Assessment of Training Course to Enhance the Lesson Study Skills for Lecturers of Souphanouvong University, Lao PDR. The researcher has formulated the research questions as follows:

1. What is the state of the problem and needs assessment to develop a training course to enhance the lesson study process for Souphanouvong University, Lao PDR Lecturers?
2. How are the results compared to the state of the problems and the needs assessment for training to promote the lesson study process?

1.3. Significance of the study

Based on the research questions and the objectives above. This study has significance in that it provides the basic information for designing a training course to enhance the lesson study process for Souphanouvong University, Lao PDR

2. METHOD

2.1. Research Design

The embedded design was applied for this study, which was discussed on the basis of interpreting both quantitative and qualitative data (Creswell & Plano Clark, 2011).

2.2. Samples/Participants

The respondents include 327 students, 167 lecturers, and 54 administrators at Souphanouvong University, according to a stratified random sampling method developed by Krejcie & Morgan. (Krejcie & Morgan, 1970, cited in Srisa-Art, 2010). As shown in Table 1.
Table 1: Population and Sample

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Status</th>
<th>Population</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Administrators</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>1. Education (FOE)</td>
<td>Lecturers</td>
<td>68</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>286</td>
<td>32</td>
</tr>
<tr>
<td>2. Agricultural and Forestry Resources (FAF)</td>
<td>Administrators</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Lecturers</td>
<td>57</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>358</td>
<td>41</td>
</tr>
<tr>
<td>3. Tourism and Economics Management (FEM)</td>
<td>Administrators</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Lecturers</td>
<td>59</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>946</td>
<td>41</td>
</tr>
<tr>
<td>4. Engineering (FEN)</td>
<td>Administrators</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Lecturers</td>
<td>48</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>609</td>
<td>69</td>
</tr>
<tr>
<td>5. Architecture (FAR)</td>
<td>Administrators</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Lecturers</td>
<td>33</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>315</td>
<td>36</td>
</tr>
<tr>
<td>6. Language (FOL)</td>
<td>Administrators</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Lecturers</td>
<td>40</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>363</td>
<td>41</td>
</tr>
<tr>
<td>Sub total</td>
<td>Administrators</td>
<td>70</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Lecturers</td>
<td>305</td>
<td>167</td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>2,877</td>
<td>327</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3,252</td>
<td>548</td>
</tr>
</tbody>
</table>

2.3. Instruments

Two kinds of research instruments were used: first is a synthetic document recorded for the contents analyses; second is a questionnaire for the administrators and a survey for teachers and students; and third is an in-depth interview with the administrators and teachers.

1) A synthetic document recorded was created a document synthesis recorded for seeking of relevance’s research concepts, theories, and policy guidelines for developing a training course to promote the lesson study.

2) The questionnaire was devised as a survey instrument in two versions: one for the lecturers and administrators, and one for the students. It used dual-response format questions to address both the state of the current problem of teaching and learning management, and a needs assessment. It utilized a 5-point Likert scales with values for current conditions and needs assessment as follows: 5 = highest, 4 = high, 3 = moderate, 2 = weak, 1 = poor. The criteria for interpreting the results of the data analysis of the current conditions and needs assessment are as follows: the means between 4.50 – 5.00 = highest, 3.50 – 4.49 = high, 2.50 – 3.49 = moderate,
1.50 – 2.49 = weak and 1.00 – 1.49 = poor. The priority needs index modified (PNImodified) more than 0.20 (Wongwanit, 2012 and Srisa-art, 2010)

3) The seven respondents in the interview included lecturers and administrators. The interviews asked for the opinions and comments of administrators and lecturers about the current state of the problem in instructions; needs assessment and approaches of the lesson study into Souphanouvong University. The face to face were used to an interview

The questionnaire and an in-depth interviews form were both verified the content validity by five specialists with the index of item objective congruence (IOC) of each question were at 1.00 indicating that the questionnaire and an in-depth interviews form could pass the qualitative criteria of validity with the IOC of more than 0.50. Meanwhile, the suitability of the questionnaire was 4.50 as a highest levels and an in-depth interviews form was 4.71 as a highest levels too (Tanthawanich & Jindasri, 2018). The result of trying out the questionnaire and an in-depth interviews form with 15 lecturers, who were not included in the sample, indicated the reliability through Cronbach’s alpha reliability coefficient at 0.920. This showed that the questionnaire’s reliability was at a high level (Srisa-art, 2010; Phanakij & Nillapun, 2016).

2.4. Data analysis

This article was divided into two parts for the statistical techniques used. The first part was the qualitative on contents data analyzing and synthesizing for a synthetic document recorded in the field of education policies and concepts and theories in training and lesson study and in-depth interview. Such as: The 9th five-year of National Economic and Social Development Plan (2021 - 2025), education and sports development vision to the year 2030 and the strategy to the year 2025, The 9th Five-Year Education and Sports Development Policy Plan (2021-2025), Strategic Plan for Teacher and Personnel Development in Education and Sports of the Lao PDR to the year 2025, and Souphanouvong University Development Strategic Plan in to year 2025. The second part was the quantitative data analyzing on the questionnaires data.

Data from the synthetic document recorded and in-depth interview were analyzed on thematic analysis that the making a concept, concept group, categories and interpreted on the analytic description.

The questionnaire for teachers, administrators and students was tabulated though descriptive analysis and a modified priority needs index. Data are interpreted using means and
standard deviations to describe the level of the current condition and the state of the problems and needs assessment and ordering important of the needs assessment by modified priority needs index. The statistics used included mean \( (\bar{x}) \), standard deviation (S.D.) and Priority Needs Index Modified. The Multivariate Analysis of Variance (MANOVA) was applied.

3. FINDINGS AND DISCUSSION

3.1. Findings

The study showed that results of study the state of the problems of lecturers’ instruction; undertake a needs assessment for training to promote the lesson study process for lecturers at Souphanouvong University; and compare the state of the problems and the needs assessment for training to promote the lesson study process as classified by samples group. The results that showed as:

1) Qualitative data

The results of the analysis and synthetic of documentary data revealed and in-depth interviews encountered that the components involved in the lesson study process consisted of 4 components and a total of 22 indicators were obtained; namely (1) Plan-Preparation; (2) Do – Teaching & Observation; (3) See – Discussion & Reflection; and (4) Strategies to promote lesson study, Then, based on this information will be leading to the design of questionnaires and to study the current situation and the needs assessment for further training course development.

2) Quantitative data

The State of the problems of lecturers’ instruction and needs assessments for course development classified by sample group on the Plan-Preparation

<table>
<thead>
<tr>
<th>Item</th>
<th>State of the problems</th>
<th>Needs Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Administrators</td>
<td>Lecturers</td>
</tr>
<tr>
<td></td>
<td>( \bar{x} )</td>
<td>S.D.</td>
</tr>
<tr>
<td>1. Plan-Preparation</td>
<td>3.39</td>
<td>0.28</td>
</tr>
<tr>
<td>2. Do – Teaching &amp; Observation</td>
<td>3.46</td>
<td>0.41</td>
</tr>
<tr>
<td>3. See – Discussion &amp; Reflection</td>
<td>3.42</td>
<td>0.49</td>
</tr>
<tr>
<td>4. Strategies to promote lesson study</td>
<td>3.73</td>
<td>0.39</td>
</tr>
</tbody>
</table>
As seen in Table 2, the overall mean of the state of the problems of lecturers’ instruction at Souphanouvong University, including the administrators, lecturers and students were at 3.57 with a high level (\(=3.57, \text{ S.D} = 0.63\)); each groups were in the range 3.39 to 3.73. Meanwhile, the overall mean of needs assessments to promote the Lesson Study Process for the lecturers at Souphanouvong University, including the administrators, lecturers and students were at 4.63 with a highest level (\(=4.63, \text{ S.D} = 0.47\)); each groups were in the range 4.33 to 4.89.

An analysis of the PNI showed ranking of priorities needs assessment index in items of states of the problems; needs assessments and the ranking of priorities needs assessment index modified in the development of training courses, as shown in Table 3.

Table 3 the ranking of priorities needs assessment index

<table>
<thead>
<tr>
<th>Item</th>
<th>State of the problems</th>
<th>Needs Assessments</th>
<th>F</th>
<th>Sig</th>
<th>PNI</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Plan-Preparation;</td>
<td>3.57 (0.62)</td>
<td>4.72 (0.41)</td>
<td>7.53</td>
<td>0.001</td>
<td>0.33 (4</td>
<td></td>
</tr>
<tr>
<td>2. Do – Teaching &amp; Observation</td>
<td>3.52 (0.69)</td>
<td>4.71 (0.44)</td>
<td>0.36</td>
<td>0.695</td>
<td>0.42 (1</td>
<td></td>
</tr>
<tr>
<td>3. See – Discussion &amp; Reflection</td>
<td>3.68 (0.66)</td>
<td>4.62 (0.41)</td>
<td>20.59</td>
<td>0.720</td>
<td>0.35 (3</td>
<td></td>
</tr>
<tr>
<td>4. Strategies to promote lesson study</td>
<td>3.49 (0.80)</td>
<td>4.45 (0.62)</td>
<td>5.58</td>
<td>0.004</td>
<td>0.37 (2</td>
<td></td>
</tr>
<tr>
<td>Overall of PNImodified</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.37</td>
<td></td>
</tr>
</tbody>
</table>

As seen in Table 2, the overall mean of the priorities needs index modified was at 0.37 (the range of PNI between 0.33 to 0.42). The four priorities are namely: the first was the do – teaching and observation (PNI = 0.42), the second was strategies to promote lesson study (PNI = 0.37), the third was see – discussion & reflection (PNI = 0.35), and finally was plan-preparation (PNI = 0.33), respectively.

The Multivariate Analysis of Variance showed significant differences between Plan-Preparation in terms of state of the problems and Needs Assessments (\(F = 7.53, \text{ sig} = 0.001\)), strategies to promote lesson study (\(F = 5.58, \text{ sig} = 0.004\)).

The cross-tabulation also showed that plan-preparation, and strategies to promote lesson study in terms of state of the problems and needs assessments were significant differences compared with the administrators and lecturers to the students.
In addition, the insight information we had from the interview also mentioned the status of the instruction particular in before the instruction every administrators/teachers had the central outline from the ministry to analyze for their lesson plan, this mentioned plan was a kind of annual plan for each subject that planed individually; for the instruction implementation they had collected their teaching contents and students remarks by themselves. But they never conducting any record and observation about their teaching or students behaviors, they have not an interview with the students; other colleague had no opportunity to observe each other teaching and student behaviors; there is no any open classes for another stakeholder to participated or observation; the instruction improvement process was an annually conducted and the lesson study process was issued in the faculty policy but not implement as a concrete system.

Moreover, the qualitative data from the interview report that the lecturers need to have training to promote the lesson study due to the belief that participation in such topic will enhance their insight of lesson study in the right way and create new lecture environmental in the campus; Also, it would be an opening for all lecturers to exchange their experience and contents to create the instruction environment that emphasizes the development the learners’ learning.

3.2. Discussion

This section discusses the research results and findings. As the data analysis suggests a strong positive relationship between states of the problem of the lecturer’s instruction and needs assessment to promote the lesson study process, the research objectives are well served as namely:

The results of state of the instruction’s problems were found in high level. Because of the state of the problems of instruction at Souphanouvong University has been conducted to the educational development policy guidelines for teaching and learning according to 3 characteristics (Nationally characteristics, Scientifically characteristics and Socially characteristics) and 5 educational competencies (Personality competencies, Intellectual competencies, Working competencies, Physical competencies, and Artistically competencies) at a certain level. Both in terms of plan preparation that initiates from identifying students' problems from actual problems in the classroom according to policies or curriculum to set goals, directions, and guidelines for developing students' learning outcomes. Setting up lesson plans in various subjects together with other teachers. By anticipating the problems difficulties and
concepts of students in order to lead to teaching and learning management that collects information on teaching operations of instructors and learning outcomes of learners by themselves. Teaching behavior and learning behavior of students were observed and recorded by themselves.

Even though the state of the instruction’s problems were found in High level. Meanwhile, the needs assessment to promote the lesson study process for lecturers of Souphanouvong University, Lao PDR was highest level because of the lecturers would like the needs assessment for self-development in their instructional, as follows: First, Plan-preparation, namely planning and designing instructional plans for various subjects in collaboration with other lecturers; A study of policies or curriculum to set goals, directions, and practices for developing learner learning outcomes, and anticipating problems difficulties and concepts of learners Including planning and designing lessons in line with the goals of teaching. Then, do – Teaching & Observation, including methods for collecting information on teaching operations of instructors and learning outcomes of learners by themselves. Collaboration with other teachers to observe the problems, difficulties and ideas of the students, and opening class to other teachers or stakeholder to observe the teaching-learning behavior of the students. Finally, see – discussion & reflection of the lecturer which who would like their colleagues to investigate teaching performance as well getting students to reflect on their ideas about teaching and learning management. Including open classes which are open for other teachers to observe the teaching and learning management. The information above corresponded with the theorem of study the states of the problem and needs assessment of Charmine, Yuka, Victoria & Karen (2007) and Dwi Susanto Ali Purwoko, Regina, and Ikhsanudin (2023) which used research-designed processes with need analysis, then design, and finally development. Meanwhile, Phansaytha&Khasay (2020) who conduct research on Training Needs Assessment and Expectation on Professional Successful of supportation staff at Dusit Thani College, the study found that the needs for the educational was in moderate level and also the supportation staffs at Dusit Thani College has an expectation on professional successful in case of position, carrier and responsibilities at the High level; the research conducting to study the current context as a fundamental to study the needs of next development; for the assessment of training needs to considerate the priority needs index (PNI) was in highest at all processes including the instruction planning, the instruction reflection, the lesson study process and the instruction implementation as ranked.
In addition, The research was also supported by Sousavajdee & Sthinyakorn (2020) whose study on the training needs assessment to instruction design for vocational teachers in a program of industry technicians in Lao PDR found that the priority needs index (PNI) of the training was in highest level including the following ranked processes: Teaching aid design, Curriculum analyzation and Neo Method in range of 0.44 to 0.57.

The outcomes of this research were both consistent and inconsistent with the research of Patisondicharern (2010) whose study on the training needs assessment to enhance the personnel potential at Srinakharinwirot University; found that the staff at the Srinakharinwirot University has a need of training on personnel potential development at overall high level including of each process; and for the non-supported outcomes the research found that the staff with different ages and genders has no significant different statistics for the training needs; However, the research results differ because the context of Srinakharinwirot University may be different in terms of educational policies, environment, and teaching practices.

4. CONCLUSIONS

4.1. Conclusion

All of the 54 administrators, 167 lecturers and 327 students from Souphanouvong University showed that the state of the problems of lecturers’ instruction were moderate, the needs assessment were highest and PNI was higher than 0.20 that much be used to organize a training course to promote the lesson study process for lecturers at Souphanouvong University, Lao PDR. the state of the problems or current condition is most lecturers' instruction has not yet focused on teaching design for learners. Whenever the comparison of state of the problems and needs assessment to promote the lesson study process, classified by administrators, lecturers and students. Which administrators and lecturers showed no difference in significance. On the other hand, administrators and lecturers were different with students for the state of the problems and needs assessment at the .05 level of statistical significance.

4.2. Suggestions

According to these results, the administrators, teachers and the stakeholder or educational personal relevant should consider the following: Firstly, the Souphanouvong University or other Higher Education in Lao PDR could use the results of this research as resource for the training course development to match the real needs of its lecturers. Secondly, the outcome can be integrated with instruction tools or training modules to promote the lesson study processes in any discipline for either normal onsite classrooms or online platforms effectively. Finally, it is
recommended that the causes of the current condition of teachers’ instruction be studied. In addition, it is necessary for each field of study to reflect the information for the promotion of the lesson learning process of teachers at the higher education level (higher education) of Lao PDR effectively.

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Suwiriyasana Co., Ltd.

