

## **CHAPTER IV**

### **FINDINGS AND DISCUSSIONS**

This chapter presents and discusses the result of the research based on the data was gathered from the lesson plans of the subjects and interviews via WhatsApp messenger and Google form, which the interview is useful to support the results of the data of lesson plans. In this chapter, the researcher presents findings and discussion from the study in order to answer the research questions about the use of HOTS in pre service teacher's lesson plan.

#### **A. Findings**

The results of this study were obtained through document analysis of lesson plans and interviews. The interview used a semi-structured interview. Document analysis is done by analyzing the assessment in the lesson plan. Based on the formulation of the research problem, the results of this study include how the use of HOTS assessment in the pre-service teachers' lesson plan.

##### **1. Designing HOTS Assessment**

Teachers must focus on the main components of the lesson plan implementation while creating lessons that support HOTS. It is important to organize and control the questions that will ask to the class. The lesson plan serves as the teacher's manual for managing the educational process. Although there are no set templates for lesson plans, they always include goals, objectives, activities, and assessments.

##### **2. Description of Research Result of Lesson Plan**

**a. The Result of Analyzing of The Lesson Plan and Interview of Respondent 1**

Respondent 1 believed that HOTS is important to students and she understood HOTS well, she revealed that it is important for a lesson plan to use HOTS to make students think more critically and analyze problems thoroughly; she created 6 lesson plans while in teaching practice II with different class and level. The goals in one of the lesson plan are as follows:

- 1) Analyze the expression of asking and giving suggestion from the dialog.
- 2) Arrange the vocabularies to be a sentence about suggestion.

According to verb analyses from the rubrics, there was some HOTS keyword in the goals. “Analyze” (C4) and “arrange” that in “create” (C6) level, so it included into ‘intermediate’ category.

The learning objectives are through a scientific approach by playing game method, question and answer technique will be used in the teaching and learning process, read and analyze the expressions of *asking for and giving suggestion* from the dialog and arrange the vocabulary to be a sentence about the suggestion. By using the approach, method, and technique mentioned above, respondent 1 expect that the students will be able to improve their reading skill and vocabulary mastery.

The ABCD reference is used as a guideline for developing good and correct learning objectives. Based on the rubrics it must consist of aspect ‘A’

(students), aspect 'B' (analyze *the expressions of asking for and giving suggestion* from the dialog and arrange the vocabularies to be a sentence about suggestion), and aspect 'C' (students will be able to improve their reading skill and vocabulary mastery), but Aspect "D" does not exist. Aspect "B" got under the "intermediate" category because it contained the HOTS keyword "analyze."

Respondent 1 began the first activity with the operational verb "respond," indicating level C1 (knowledge). Following that, the core activity remained focused on the LOTS, with students "listening" to the dialog that the teacher read, followed by students being asked to "analyze" the expression and "create" the dialog on their own, and the operational verb at the C6 level "creating". HOTS was not used in the final activity because students and teachers only completed the material. It was clear from the activities that lesson plan by respondent 1 has two activities that support HOTS, "analyze" and "create". It is classified as 'intermediate'.

For the assessment section, it could be seen that the respondents only followed the existing patterns, but they were in accordance with the goals to be achieved. She also argues that questions (assessments) are made according to student's HOTS level and taught theoretically then put it into practice by solving problems. The most difficult aspect for teachers to be developed is HOTS assessment. The respondent 1 needed more practice developing HOTS assessments; because she still used some questions from the book and there was no development of other questions, she also used dialogue a lot as an activity that

is repeated in every meeting and it is clear that she only used one HOTS verb "analyze" C4 level.

**b. The Result of Analyzing of The Lesson Plan and interview of Respondent 2**

Respondent 2 understood HOTS very well; his lesson plan already has HOTS verb classification in the learning objective and learning activities. According to him HOTS is needed in making lesson plans because it is essential in English learning teaching nowadays to enhance student's critical thinking and creativity. His lesson plans have the goals as follows:

- 1) Choose the correct answers for multiple choices questions and answer an essay question about an Analytical Exposition Text "Why students should stop cheating",
- 2) Rearrange the analytical exposition text from the text organization which is still arranged randomly (Thesis, argument, and reiteration) of an Analytical Exposition Text "Why students should stop cheating.

The goals included HOTS verb as "analyze" (C4) and "rearrange" which is include "create" (C6) level, It is mean based on the verb analyses the goals are classified as "intermediate".

The teaching and learning process used was scientific approach with *think-pair-share* technique, Analyzing the expressions of asking, giving, agreeing and disagreeing with opinions in the dialogue given accurately and completely and

enhance their speaking ability by practicing dialogue with a role play technique that requires 5 students to participate smoothly and fluently. Respondent 2 anticipates that the students will be able to advance their speaking comprehension by utilizing the above-mentioned strategy.

For the aspect “ABCD” the learning objective include “intermediate” category because aspect B just put one HOTS verb that is “analyze” and the conditions that indicate students performing (aspect c) was not explained by respondent 2.

The learning activities of respondent 2 lesson plan included 21st-century skills, as the respondent said in the interview that teacher can engage students in HOTS activities by applying group discussions technique whether it is small group or large group and one thing that teacher have to pay attention to is the interesting topic to be discussed regarding to the material being taught.

The activities were divided into three categories: critical activities, communication and collaboration activities, and creative activities. Lesson plan’s activities covered activities that aid in the acquisition of related skills. Critical activities encouraged students to think critically about the issues raised in worksheet. Group activities reflected communications and collaboration activities. Therefore, it is still possible to have discussions by individuals so that the students will have their own point of view. By group discussions technique, students will enhance their 4C skills. Nevertheless, learning activities are included in

“emerging” category because he only include the word analyze in almost every activity.

The assessment in respondent 2's lesson plan was very varied, as evidenced by the variety questions given to his students. From multiple choices, yes or no, essays and etc. Respondent 2 also understands what factors must be considered when conducting a HOTS assessment, as he stated in the interview, "we must pay attention to; First, the questions should be divergent. Second, create a collaborative activity such as group discussion. Third, inform the learning objectives at the first place. Fourth, give feedback and review sessions for the students. Therefore, based on the rubric for assessment include “intermediate” category.

**c. The Result of Analyzing of The Lesson Plan and interview on Respondent 3**

Respondent 3 acknowledged that this was her first exposure to HOTS and requested an explanation from the researcher when asked about how well she understood HOTS. When it was explained, she appeared to understand what HOTS meant but did not have a deeper understanding. She stated that HOTS in learning aims to encourage critical thinking in students. When pressed for more information, respondent 3 only explained by looking for answers on the internet.

The learning objectives in the lesson plan were created by respondent 3 and ranged from low-level to higher-order at the level of analysis. The teacher posed a problem and the students were asked to come up with an answer. The

operational verb had been specifically measured. Low-level thinking indicators are included in the list, which help students progress toward higher-level thinking indicators.

#### Learning objective/goals

- 1) Understanding the structure of the text of the expressions of giving and asking for information regarding opinions and invitations
- 2) Understanding the linguistic elements of the expressions of giving and asking for information regarding opinions and invitations
- 3) Responding to opinions and invitations and offers submitted to teacher
- 4) Identify expressions of opinion and invitation
- 5) Identify differences in the way of disclosure from each context

Based on the rubric, the goals and learning objective include “intermediate” category because goals contained HOTS category “identify” which is include in “analyzing” part, as same as in aspect ABCD, the lesson plan did not include Aspect C and D, but in aspect B include the HOTS keyword “analyze”

Respondent 3 intended to learn activities based on HOTS by asking factual and hypothetical questions. Learning with factual questions requires the development of low-level thinking skills. Lower-order thinking skills can be trained first, followed by higher-order thinking skills. As a result, HOTS can range from factual to hypothetical questions.

In assessment session, respondent 3 did not include material for questions to be asked of students but mentions how the assessment will be carried out. That is in the form of multiple choices, written tests & written descriptions, oral tests/observations on question and answer discussions and conversations as well as assignments.

Moreover respondent 3 explain about how teacher pay attention in compiling HOTS question, she state that teacher should be encouraging them to explore, be curious, come up with questions and investigate how things work, asking them to think of different ways to solve problems, providing choices of activities that involve planning and decision making.

**d. The Result of Analyzing of The Lesson Plan and interview on Respondent 4**

Respondent 4 explained HOTS as a “type of question” that is given to students in order to know how far they understand the material in depth it requires better thinking skills such as analyze and etc. but in reality she still uses lower order thinking as practice as well as goals/learning objectives in the lesson plan below:

- 1) Understand the social function, structure, and linguistic elements related to invitations;
- 2) Identify social functions, structures, and linguistic elements related to invitations;



- 3) Explain the main idea, specific information, and detailed information in the invitation;

This lesson plan's learning objectives include the components of the “ABC” aspect except "D" aspect by stating that the students, indicators and learning models/methods, but did not mention the brief outline of the activities that the teacher will complete in depending on the level desired. The operational verbs used in the formulation of learning objectives are in Low Order Thinking Skills that are C2 (understanding and explaining), but also contains the verb "identify," which is used when "analyzing" the C4 level. There appeared to be no other development in learning objectives, and activities that only listen to the teacher's presentation are continued. As a result, the “B” aspect is classified as "emerging."

Higher order thinking skills were not all supported the lesson plan's learning activities created by Respondent 4. Students are asked to “identify” (C4) sentences in this activity, which is followed by discussion (C2). In order to confirm the activity even more, interviews were conducted. Respondent 4 asserted that teachers need to incorporate analytical tasks like "describe" and "explain," among others, It is clear that respondent 4 does not fully comprehend the classification of Higher order thinking from the use of the verb, which is still included in the Lower Order Thinking Operational Verb. Further analysis of the questions that were asked of the students revealed that they were not able to engage in higher-order thinking.

In the Assessment on the lesson plan of respondent 4, it also does not include examples of assessments used in learning, but it does include descriptions of the types of questions that will be given, namely: Technique or type (group assignment), Forms of instruments (oral questions and written tests), Instruments/questions (Multiple choice test, description test and assignments). Furthermore, respondent 4 believes that in order to engage students in higher order thinking, the teacher should ask questions that do not immediately lead to the HOTS category, but rather begin with questions that stimulate their critical thinking.

**e. The Result of Analyzing of The Lesson Plan and interview on**

**Respondent 5**

Respondent 5 defined HOTS as the capacity to think critically or more critically than general thinking, and he also believed that using HOTS in lesson plans is helpful for fostering students' capacity to approach problems in novel ways. However, in his opinion, using HOTS in lesson plans could also be omitted, i.e., implying that HOTS does not have to be a part of lesson plan, and then the goals and learning objectives of respondent 5's lesson plan are listed below:

Goals:

- 1) Identify the expressions used for expressions of asking for attention, checking understanding, in English
- 2) Identify the expressions used to reward performance

- 3) Identify the expressions used to ask for and express opinions in English

Learning objective:

- 1) Understanding and capturing the meaning and purpose of action texts asking for attention, checking understanding, appreciating performance, asking and expressing opinions, and responding to them.
- 2) Identify and analyze the structure of the language of action texts asking for attention, checking understanding, appreciating performance, asking and expressing opinions, and responding to them.
- 3) Able to practice dialogs from action texts asking for attention, checking understanding, appreciating performance, asking and expressing opinions, as well respond.

Respondent 5 carefully groups learning objectives. The audience's elements, behaviors, circumstances, and degrees have all been explained in detail. Aspirations for student character development are also connected. However, respondent 5 only discussed the ability to think at a lower level “understanding”, and only include "identifying" as HOTS operational verb without elaborating the other function of higher-order thinking.

Respondent 5 described learning activities that are structured around learning objectives. There are no activities in this activity that promote higher-

order thinking skills. Students are only required to listen to explanations before being instructed to read and follow the material. Only one activity that stimulated HOTS was “students are expected to describe the material by identifying and analyzing the structure”.

Finally, it is hoped that students will be able to carry out dialogues in front of the class in pairs, asking for attention, checking understanding, appreciating performance, asking and expressing opinions, and responding to them. In this session, all activities do not develop higher order thinking and are classified as "emerging."

The assessment carried out by respondent 5 is basically on the core learning activities, he made a rubric to assess students in several aspects, namely such as response, understanding according to language structure, student performance in understanding the material, intonation and fluency in pronunciation as well as students' accuracy in understanding and telling return. However, this assessment also does not develop students' higher order thinking because in the core learning activities of the lesson plan does not contain HOTS operational verbs.

**f. The Result of Analyzing of The Lesson Plan and interview on Respondent 6**

Respondent 6 did not appear to comprehend what HOTS are at all; he understood the concept but was unable to elaborate. According to him, HOTS is needed to encourage students to think of solutions to every problem in the

classroom and to learn from one another through problem solving. However, in practice, respondent 6's lesson plan did not include the HOTS category.

The Basic Competencies and Competency Achievement Indicators were not explicitly included in the lesson plan prepared by respondent 6 at several points in the review of the lesson plan's components. Because the respondent did not include the development of Competency Achievement Indicators, the level of thinking analysis begins with the Learning Objectives. Here the Learning objective of the lesson plans of respondent 6:

- 1) Identify expressions for praising and receiving compliments.
- 2) Appreciate and respond to appreciation/compliment
- 3) Make a simple text that contains expressions of praising and receiving praise.

The used of "appreciate," which are operational verbs at level C2 (understanding), shows that the formulation of learning objectives did not imply that the operational verbs used reflect HOTS. However, respondent 6 asked students to "identify" (C4) the expressions and "make" (C6) a simple text that contained sentences of praise and receiving praise at the end of the lesson, which is include operational verb "create" level, but in its application respondent 6 did not use this learning objective in learning activities.

Respondent 6 described learning activities that did not correspond to the learning objectives. There were no activities in this activity that support higher-order thinking skills, and the teacher performs 90% of the activities; students only

listen to explanations and are given examples of problems related to learning material.

Furthermore, there is no indication of HOTS keywords used in learning activities, Respondent 6 then considered HOTS as “methods” that do not need to be used in every lesson, which is consistent with his statement that he did not include HOTS in learning but that the learning process ran smoothly and students understood the material presented well. Therefore, it can be concluded that respondent 6 does not comprehend the idea mentioned in HOTS.

Even in the context of an assessment, He only mentioned that giving students a problem to later solve on their own was sufficient to engage students in higher-order thinking. He contends that the key to understanding the extent of student understanding is to put faith in students' abilities and give them the freedom to choose their own learning style.

The lesson plan did not even included assessment questions, but respondent 6 mentions what the assessment will be, such as Assessment of attitude (Observation of students' activeness and presence in class), Assessment of knowledge (Students' understanding of working on multiple choice questions), and Assessment of skills (presentation and analysis of information results). This can also mean that Respondent 6 only make the questions on the student worksheet without developing new questions to adapt the learning material.

**g. The Result of Analyzing of The Lesson Plan and interview on  
Respondent 7**

Respondent 7 appeared to have put too much emphasis on the question during the interview, made the response sound too contextual. Respondent 7 appeared to not understand what HOTS was because she explained that it was the same as the website's explanation without adding any of her own opinions. However, respondent 7 applied some HOTS operational verb to the lesson plan and the learning in the classroom; this can be seen from the learning objectives in the lesson plan,

- 1) Identify the expression of asking and giving suggestion in the dialog.
- 2) Determine the expression of asking and giving suggestion according to the context.
- 3) Re-arrange a simple sentence about asking and giving suggestion.

#### Learning Objectives

- 1) Understand the social function, language feature and structure of the text well.
- 2) Write the sentence correctly and clearly according language feature and structure of text.

Given that indicators and learning objectives have different formulations, it is possible to analyze learning activities by using one of the indicators and learning objectives. The activity start with “identify” the expression which is include in “analyzing” (C4) level, after that the LOTS stages comes in the next activity namely "determine" (C2) the students being asked to determine the expression of asking and offering a suggestion, are used to begin core learning

activities. The activity then continued with "present" (C3), a dialog expression for asking and giving suggestions. Given that Basic Competence of Knowledge only reaches the C2 (LOTS) stage, this activity should not be done. The sentence about prohibition related to the provided picture is then "arranged" by the students which is in operational verb "create" (C6). The choice of this activity appears to be backwards; the Basic Competence of Skills activity belongs in the HOTS stage rather than the LOTS stage. Respondent 7 continue the activity by providing reinforcement and a chance for students to ask unclear questions.

*“The students asked to “identify” and “determine” the expression of asking and giving suggestion in the dialog”. (The operational verbs in one activity are not equal)*

*“The students are asked to “present” the expression they have found in the dialog”.*

*“Then, Students are asked to “arrange” the sentence about prohibition related to the picture that has given by the teacher”.*

Respondent 7 appeared to follow the context too much until everything was done to the end; similarly to the results of the interview, she stated that she attracted students in higher order thinking by showing them several pictures and then having them think about it. This is also consistent with the assessment of learning activities, which are the same as learning objectives.

Assessment of behavior:



Through observation of attitude behavior spiritual and social in learning activities related to asking and giving suggestion. (Maintain interpersonal relationship with teacher, friends, and others.

Assessment of knowledge:

Through observation a picture, a dialog and give some questions related to the material about asking and giving to suggestion.

**Attachment 1** “Teacher gives a picture related to material asking and giving suggestion”

**Attachment 2** “Teacher gives some question related to material asking and giving suggestion as brainstorm like “what do you think about .....?””

Assessment of skill:

Skill assessment taken from the result of student’s practice that can measure the students writing and speaking skill.

Exercise:

**Attachment 3** “Students identify the expression of asking and giving suggestion”. “Analyze” C4 level

**Attachment 4** “Re- arranges the sentence related asking and giving suggestion”. “Create” C6 level

When asked about the development of HOTS in learning, she only mentioned one lesson plan strategy, the teacher can collaborate with their students and should apply think, pair, and share; then make the class comfortable and fun in learning. Moreover in making the HOTS question, as if she did not understand

how HOTS should be used in lesson plans and how it is learning-based, she also mentioned the same thing, namely accompanied by games and collaboration.

**h. The Result of Analyzing of The Lesson Plan and interview on Respondent 8**

Respondent 8 clearly understood HOTS and explained how they were used in the lesson plan. He claims that HOTS is important in class, because it allows students to think rather than just memorize, as well as improve their cognitive abilities. HOTS refers to students' ability to think critically and logically in order to generate new ideas or products as a result of a lesson.

The objectives that were stated aligned with how learning indicators were created. The proposed objectives' sentence structure had several goals that demonstrated higher-order thinking abilities when it was analyzed for meaning. The specific area of the subject being studied was made clear to the students, which still includes "understand" (C2) and "respond" (C1) and it is still included in the LOTS category.

- 1) Identify some giving and asking expression about opinion and thought.
- 2) Identify the different ways of expressing each expression.
- 3) Understand the structure of giving and asking expression about opinion and thought.
- 4) Understand the linguistics elements of and asking expression about opinion and thought.

- 5) Make something (ex. dialogue) related to opinion and thought expression.
- 6) Respond some opinion and thought that made to them.

The next section is learning activities, which is created by respondent 8 and is based on several principles such as learning from simple to difficult things, learning from the authentic to the theoretical, and continuing to learn by focusing to scientific framework. Identifying is one of the descriptions of the level of thinking analyzing (C4), which is demonstrated in the early learning activities that start with activities that require students to identify concepts about opinion and thought material that they do not understand. The HOTS also appears in the middle of the learning activity, where students analyze (C4) the video that the teacher provides about opinion and thought, and then the student is asked to discuss with their group about the video, after that student asked to discuss with group about the video which is still part of understanding (C2), so that in the initial activity, and re-present the material it is still a LOTS category.

Furthermore, at the end of the lesson, students are asked to write a summary of their thoughts and opinions about the teacher and today's lesson, which relates to the material being taught at the time. Preparing consistent emerging topics, beginning with LOTS and progressing to HOTS, will greatly assist students in improving HOTS and is strongly advisable; this benefit is shown in the learning activities planned and applied by respondent 8.

Respondent 8 really understood what his students needed in the assessment section; in fact, he divided the assessment into several parts.

Respondent 8 first administered a pre-test to initiate core learning, followed by an assessment in the middle of the lesson by interspersing material, followed by exercises to gauge students' comprehension of the material being taught, and finally, multiple choice questions to hone students' recall and thinking skills.

When asked how respondent 8 drew students into higher order thinking, he enthusiastically explained many things. He stated that HOTS is used to determine how well students understand a lesson and to train students to process and explore the lesson broadly. As a result, he mentions interesting activities that can stimulate students' interest in learning, such as Draw pictures to show a particular event / make a coloring book, make up a puzzle or a game about the topic of study, write a biography of any one of the characters, Dramatize the content, Conduct a debate about an issue of special interest and write a different ending to the story /play.

He claims that these activities will develop students' critical and creative thinking abilities and do not left out the most important parts, such as providing feedback to students and encouraging them to think critically. Even though the words "analyze" and "create" were frequently used in the questions, it was clear from what he did in the lesson plan that he wanted to influence change and help students understand what they were learning. Then the assessment part is classified as "intermediate."

### 3. The Result of Level of HOTS in The Lesson Plan

Table 4. 1 The Result of The Analysis

Respondent	Aspect of The Lesson Plan			
	Goals	Learning Objective	Learning Activity	Assessment
1	Intermediate	Intermediate	Intermediate	Intermediate
2	Intermediate	Intermediate	Emerging	Intermediate
3	Intermediate	Intermediate	Intermediate	Intermediate
4	Emerging	Emerging	Intermediate	Intermediate
5	Intermediate	Intermediate	Emerging	Intermediate
6	Intermediate	Emerging	Emerging	Intermediate
7	Intermediate	Intermediate	Intermediate	Intermediate
8	Emerging	Emerging	Intermediate	Intermediate

## B. Discussion

According to the findings of the study, not all documents of lesson plan apply HOTS-based student lesson plans, despite the fact that five of them compile and implement the two HOTS stages, namely "analyze" and "create," two respondents prepare and implement LOTS and HOTS in sequence from "understanding" (C2) to "Create" (C6), and only one respondent did not prepare and carry out all HOTS and most of them are still in the intermediate level.

In compiling the stages of activities towards HOTS, it is best to avoid skipping the stages as was done by respondent 7 and even respondent 6. Respondent 7 begin her activities with C4, which means HOTS operational verb, then continue with LOTS operational verbs, namely C2 and C3, and conclude with HOTS again. Respondent 6 is more severe, he began the activity with C2 "understanding," then moved on to C4 "analyzing," and C6 "create," but the activity was not carried out in accordance with the learning objectives. Even in the

final session, there was no indication that students were required to write summaries, implying that C5 was not added. There is a concern that skipping several stages will make it difficult for students to reach the final HOTS stage, namely creating. It is recommended that all stages, both LOTS and HOTS, be prepared and implemented, even if it requires more meetings. Unfortunately in all lesson plans, no one does all the stages sequentially. They all skipped the C5 "evaluate" stage, where C5 was only used once in each meeting, that is at the end of the lesson, when students were asked to make a summary of the lessons they had learned.

It is difficult for teachers to develop HOTS assessments in the lesson plan. The teacher prepares two types of assessments: identify and explain, but neither a creative nor an evaluation type. According to Navel et al. (2021), there have been more unfamiliar problems added to assessment tools since 1998. Additionally, they contend that increased focus is necessary to raise assessment quality.

An overview of the assessment of the preparation and implementation of student lesson plans was also obtained from the results of the data analysis of the 8 respondents' lesson plans. This is consistent with Walid et al. (2019), who found that students in their learning received an average score when compiling an assessment that included HOTS. The assessment of HOTS-based student lesson plans begins with a lesson plan study that includes an analysis of the aspects of lesson plan preparation. These are, core competencies and basic competencies, indicator formulation, learning objective formulation, selection of teaching materials, learning activities, learning resources, and learning assessment design.