Multimodal Feedback Workshop for English Teachers in Designing Questions Based on Higher Order Thinking Skill

Syafryadin¹, Dian Eka Chandra Wardhana², Annisa Astrid³

¹ University of Bengkulu, Bengkulu, Indonesia; e-mail: syafryadin@unib.ac.id
² University of Bengkulu, Bengkulu, Indonesia; e-mail: dec.wardhana@unib.ac.id
³ UIN Raden Fatah Palembang, Palembang, Indonesia; e-mail: annisaastrid@uinradenfatahpalembang.ac.id

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ABSTRACT

This study aimed to determine whether or not there is quality improvement of HOTS-based questions through multimodal feedback made by English teachers. Besides, this study intended to find out the forms of feedback given during the implementation of multimodal feedback and English teachers’ perception of multimodal feedback in designing HOTS-based English questions workshops. This study used a mixed-method involving 30 English teachers willing to participate in the training. Furthermore, research data collection was done through the provision of tests, interviews, and observations. Several experts have validated the instruments used in this study. The data were analyzed quantitatively and qualitatively. Quantitative data were analyzed using SPSS, while qualitative data in interviews and observation sheets were analyzed using several stages, including data reduction, data display, and concluding. The results of this study indicated a quality improvement of HOTS-based English questions that have been made by English teachers, which was evidenced by an increase in the results from pretest to posttest. The next finding is that three types of feedback helped teachers make HOTS-based English questions through multimodal feedback: peer feedback, oral conference, and written feedback. Another finding was that English teachers gave a positive perception towards designing HOTS-based English questions through multimodal feedback because these activities provided positive input on their ability to make HOTS-based English questions. In conclusion, the findings of this study benefit English teachers in designing HOTS-based questions, so that teachers can implement the result of the workshop in the teaching and learning process.

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Corresponding Author:
Syafryadin
University of Bengkulu, Bengkulu, Indonesia; e-mail: syafryadin@unib.ac.id

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1. INTRODUCTION

According to the Regulation of the Minister of National Education Number 16 of 2007, Teachers must have professional, pedagogical, social, and personality competencies. All these competencies are integrated into teachers’ performance. Concerning a teacher’s performance, the Teacher is able to teach and can also make questions that can measure students’ ability to the extent to which the learning objectives have been achieved. The questions that are made especially for practice questions must stimulate students to have higher-order thinking skills.

English teachers are expected to have the skills to improve students’ higher-order thinking skills in answering English questions. It is because English will be continued to be studied up to the highest level of education. In learning English starting from elementary school to high school level, the learning process's emphasis is on reading skills. Therefore, students must be trained to answer questions, especially reading questions, because reading questions have a larger portion of English questions. (Bahar, 2017)

The problem is that reading questions made by English teachers have not been able to improve students’ higher-order thinking skills. Even the designed questions are still not by the applicable rules and approaches to preparing questions because the questions that are made are directly taken from question banks on the internet, which is not necessarily by the conditions of students and do not also focus on improving high-level student thinking (Pramawati & Wardana, 2016). In preparing the questions, the teachers should know the students’ needs and the material. This issue also happened to teachers in Central Bengkulu Regency, Bengkulu Province. The competence of English teachers in Central Bengkulu was still in the developing stage category in making English questions. Based on initial observations and interviews with English teachers in Central Bengkulu Regency, the quality of the questions designed to test students' abilities was still not in accordance with existing standards, and not all of them apply HOTS in preparing these questions.

Therefore, English teachers need to prepare questions that contain higher-order thinking skills (Brookhart, 2010). An alternative treatment that can be given is to apply online multimodal feedback to teachers in order to improve the quality of the questions and the teachers' competence. Feedback is an important part of improving the ability and appearance of both students and educators in learning (Evans, 2013). Feedback may positively and negatively impact learners (Hattie & Timperley, 2007). This is because the quality of feedback given by educators or those who have the authority to provide feedback can be classified as positive or negative.

Many previous researchers have researched feedback or multimodal feedback, but previous researchers only focused on improving students’ writing and speaking skills through the feedback. (Chuang, 2007; Elola & Oskoz, 2016; Elshirbini & Elashri, 2013; Faroha et al., 2016; Hadzic, 2016; Ismail et al., 2008; Maolida, 2013; Pakbaz, 2014; Phillips et al., 2016; Samarindo et al., 2013; Zhang, 2018)

In addition, previous researchers also researched to improve the quality of teacher candidates through multimodal feedback and not improve the quality of HOTS-based questions. (Panhoon & Wongwanich, 2013; Yusuf et al., 2017) There are also previous research that focused on the use of multimodal feedback with technology to improve learner abilities in general (Campbell & Feldmann, 2017; Emery et al., 2003; Hurst & Vriens, 2016; Jacko et al., 2004; J.-H. Lee & Spence, 2008; J. Lee et al., 2009; Sun et al., 2010) Furthermore, previous studies only focused on the perception of multimodal feedback (Dyan, 2017). Aside from multimodal feedback, there are also previous studies related to higher-order thinking skills, but the focus of previous researchers was only on improving the quality of these students and did not use multimodal feedback at all (Anasy, 2016; Anggraini et al., 2019; Pilten, 2010) Previous studies mostly used descriptive qualitative and experimental research designs.

Based on previous research, the current study is also about multimodal feedback. Still, this research focused on the use of multimodal to improve teacher competence and quality of English reading questions based on higher-order thinking skills, as well as multimodal feedback that will be used consisting of several types of modes such as spoken and written, teacher-student, peer or teacher-friend. Previous research, as described, mostly only limited their research on improving students'
writing and speaking skills, perception, IT use, and higher-order thinking skills that did not apply multimodal feedback. Therefore, the current study aims to find out whether there is an improvement in teacher competence and the quality of English language questions at the Junior High School level based on High Order Thinking Skills (HOTS) after being given multimodal feedback, to observe how the form of the feedback given in the design of the questions has been made and to explore the perceptions of the teachers participating in the question-making training with Multimodal Feedback regarding the advantages and disadvantages of providing feedback to improve the quality of English questions.

2. METHODS

Research Design

This research used the Mixed Method research design with the Embedded Mixed Method research design (Creswell, 2012; Heigham & Croker, 2009). The embedded mixed method was used because the type of data needed is in the form of numeric data and description data. These data were required to answer two research problem formulations. The main focus of this research was to see how effective the application of multimodal feedback is in making HOTS-based questions for English reading skills training. However, because the score data that showed the Teacher’s performance in making questions was not enough, qualitative data was needed to find out the form of feedback and how the teachers’ perception of the strengths and weaknesses of the implementation of the HOTS-based reading tutorial is.

Participants

The subjects of this study were all high school English teachers in Bengkulu, amounting to about 48 people. However, the sample used in this study was only about 30 people. The sampling technique of this research was purposive sampling. This sampling technique was chosen because 1) The 30 teachers who are willing to take part in the HOTS-based question-making workshop process, and 2) in the implementation process, the teachers would be grouped, then 30 people were considered sufficient to facilitate the observation process and the implementation of an oral conference which took a long time and was impossible for a sample that is too large. As for the interview, the researchers would choose ten people from representatives of each group. In addition, the researchers were permitted to the English subject teacher Discussion Forum in Bengkulu City.

Instruments

To obtain quantitative data, the instrument used was a test. The test given was a written test that aimed to measure the teachers’ ability to design HOTS-based English reading questions. Furthermore, to find out how the form of the feedback given by the Teacher in the group during the process of giving feedback in the group, the written feedback documentation in the design of the questions made was documented for analysis. Finally, to find out the perceptions of the teachers participating in the workshop on making HOTS-based English reading questions about the advantages and disadvantages of the technique of providing multimodal feedback in the workshop process, interviews were conducted to gather the qualitative data.

Data Sources

Sources of data from this study were in the form of primary data and secondary data. The primary data source of this research was the results of the pretest and posttest scores of 30 teachers who would undergo a workshop on making HOTS-based English reading questions. Meanwhile, secondary data sources were from semi-structured interviews, observation checklists, and documentation.
**Data Collection Technique**

The technique of collecting data from this research was to use the instruments that have been made. The instrument can be seen in the appendix. The data collection techniques of this research can be illustrated as follows:

Implementation Procedure:
1. Giving a pretest, where the Teacher was asked to make HOTS-based reading questions
2. Treatment

The stages of implementing the Multimodal Feedback workshop for making HOTS Questions are as follows:

a. Providing material by the tutor. The material provided related to the stages of making HOTS items consisting of:
   - The tutor guided the teachers regarding how to determine which basic competency from the basic competency formulation we can make HOTS questions. Basic competencies review based on the verbs used in the formulation of basic competencies contained in the next curriculum from basic competencies could determine the right text genre.
   - The tutor guided the teachers to create a test specification of questions. The test specification was needed as a guide for the teachers to (a) determine the minimum ability of basic competencies demands that could be made HOTS questions, (b) choose the main material related to basic competencies to be tested, (c) formulate question indicators, and (d) determine cognitive level.
   - The tutor guided the teachers to determine interesting and contextual stimuli related to the HOTS Level. The stimulus that could be given is in the form of giving actual cases that require students to interpret, find relationships, analyze, conclude, or create accompanied by illustrations in the form of pictures, tables, and actual graphs.
   - The tutor guided the Teacher to write the question items according to the test specification. The questions were written according to the HOTS item writing rules.
   - The tutor guided the teachers in making scoring guidelines (rubrics) or answer keys. Each HOTS item written must be accompanied by a scoring guide or answer key. Scoring guidelines were made for the form of description questions. At the same time, the answer key was made for the form of multiple-choice questions and short entries.

b. Stage of giving feedback
   1. Giving feedback between peers
      Here, teachers were grouped into several groups. One group consisted of 3 people. The teachers in the group were asked to share written comments that were then discussed together in the group. So after the Teacher finished making questions, the teachers were asked to exchange and provide written comments to each other. The items commented on are as follows:
         - Are the questions made by the test specification?
         - Is the question indicator in accordance with the HOTS rules?
         - Do the questions meet the HOTS thinking level, which is level 3 (reasoning), which includes the ability to analyze, evaluate, and create.
         - Are the instructions for answering the questions appropriate?
         - Is the reading text used appropriately?
         - Has the question redaction matched the grammar and choice of words?
      After the written comments had been given, the question sheet was returned to the person who made it. Teachers were allowed to read comments from their peers. Then, they were given time to discuss together.
   2. Tutor-teacher oral conference
      In the next session, the trainee teachers were asked to meet and discuss with their tutors regarding the questions they had revised based on comments given by their peers. The next tutor would provide additional feedback to improve the quality of the questions.
3. Giving a Postest
   The Teacher was again asked to make HOTS-based reading questions

3. Interview
   The interview used in this research was a structured interview, where the researcher arranged the questions well and systematically according to the research questions. This interview question would be addressed to teachers who participated in the training in making HOTS-based English reading questions with the help of multimodal feedback. This interview was conducted after the workshop on Designing HOTS-based questions with the help of multimodal feedback was completed.

4. Observation
   Observations in the study were carried out during the workshop process. The teachers prepared HOTS-based questions using multimodal feedback. This observation was carried out to see how the Teacher’s involvement process was during all stages of the HOTS-based question-making workshop.

5. Documentation
   Documentation was carried out to analyze the question documents that have been made and written feedback given to find out what forms of feedback have been given.

Data Analysis Technique

To analyze qualitative data, the steps taken are as follows: first, all information obtained was well organized. Furthermore, the information that has been read carefully was given data codes. The next step was making a detailed description of the case and its context. Then, the researcher established patterns, looked for relationships between several categories, and interpreted and developed natural generalizations from cases, both for the researcher and to apply them to other cases. Finally, the research presented the results of the interpretation narratively (Creswell, 2012; Heigham & Croker, 2009; Sabari, 2010) While the quantitative data obtained from the pretest and posttest scores were analyzed using the T-Test using the SPSS application (Santoso, 2014)

3. FINDINGS AND DISCUSSION

The improvement of the quality of HOTS-based high school level English questions that teachers can make after being given Multimodal Feedback

To answer the first question of this research, the teachers were given pretest and posttest to make HOTS-based questions. After the test results were collected, the test was examined by two people who have qualified abilities in Higher Order Thinking Skills (HOTS). After being examined, the researcher first calculated the level of similarity in perception between the two raters through SPSS analysis using Cohen Kappa. The results of the calculation of cohen kappa can be seen in figure 1.

![Crosstabs](image_url)

Figure 1 Cohen Kappa analysis results
Figure 1 shows that raters 1 and 2 on the test are 0.928. This means that the two raters have a very high level of similarity in perception. As the criteria in Cohen Cappa, if the results of the analysis range from 0.90 and above, then the value is categorized as very high or very strong. Therefore, based on the results of the Cohen Kappa analysis, the study results can be continued to the next stage. Furthermore, the results of the pretest and posttest of the English teachers on making HOTS questions can be seen in Table 2.

| No | Total number of teachers | Mean score | Pre-test | Post-test |
|----|--------------------------|------------|----------|-----------|
| 1  | 30                       | 69.36      | 81.33    |           |

Table 1 illustrates an increase in teacher test results regarding designing HOTS questions. This is evidenced by the increasing average of the pretest and posttest. The teachers’ average was 69.36, while in the posttest, the average was 81.33. The gap of scores on the pretest and posttest is 11.97. This result is a good achievement for English teachers.

The form of the feedback given in the question design that the Teacher has made

Based on researchers’ observation, the forms of feedback that occurred during the training in making HOTS-based English questions were peer feedback, conference, and written feedback. First, peer feedback occurs when teachers are grouped into several groups to make HOTS-based English questions. At that time, the Teacher was given time to make HOTS-based questions. After that, peers or fellow group members provided feedback on the questions made. The teachers enthusiastically provided feedback on the questions that had been made. In a sense, to be in 1 group first. They discussed. After that, the questions for each group were given to another group. And other groups provided written feedback on questions that other groups have made. The examples of peer feedback done by peers is: a peer has made 1 question which he believes is a HOTS-based question, the question is “Mention provinces in Sumatra island!”. Other peers gave feedback in oral form, that the question was not included in the HOTS because the question did not require high analysis and the answer was already on the map shown. As another example, one of the teachers gave one question “Why is Bengkulu city hot?”. Other peers gave feedback that the question was a HOTS question categorized as C4 or analysis. This is because this question requires analysis to answer them.

Furthermore, after peer feedback was done, the feedback results were then each group presented the results of the feedback that had been given in front of all teachers. Then, the tutor provided conference feedback to all teachers on the questions made. The feedback was delivered orally. The feedback was both positive and negative. Most of the feedback given by tutors or presenters was positive feedback that the teachers had been correct in making HOTS-based questions. However, the presenters also provided negative feedback or constructive criticism for teachers who were still unable to make HOTS-based English questions. For example, the teachers made HOTS questions based on the directions from the tutor. The teachers were then given more time to look at the pictures given so that they could make HOTS questions. For example, five teachers were allowed to give questions that had been made. The first teacher asked, “why are all foods given fried onion on them?” The tutor gave positive comments to the Teacher where the tutor said that the question was a HOTS question category C4 because the question made the answerers analyze the case. The second Teacher made questions like, “Could you eat all the food?”. The tutor responded happily and stated that the question was categorized as HOTS with C5 and C6. This is because the question can be an evaluation of whether or not one is able to finish the meal. If they can not, it means the food is too much. This can be the initial part of C6. If the food can be consumed, it means that he or she has decided that the food can be consumed. The third Teacher asked, “Which one do you want to spend first, satai or soup?”. The tutor or presenter immediately stated that it was a HOTS with category C6 because the question could provide a decision for the answerer. The fourth Teacher asked a question like this “Which one do you
choose from those four foods?”. Of course, the speaker said that it was a HOTS category C4, and C6 because apart from analyzing, the answerer would give a decision too. The fifth Teacher made the question “Could you change the ingredients of the food from meat to be tofu?”. The presenter or tutor immediately gave feedback that it was HOTS because the questioner asked an innovation question or created something new from the food.

Then, written feedback was also carried out by the participants and tutors. The participants also provided feedback in writing to other participants. In this case, the participants exchanged the results of their work. Based on the results of observations, most of the written feedback also gave positive comments on the questions made. Still, some comments stated that the questions made were only for analysis and evaluation. And that is indeed part of the HOTS for levels 4 and 5 or C4 and C5, while for C6, it is still very difficult to make the problem. Some examples of questions that have been made by the teachers are: why do you like satai?, is it true or not, the ingredient of that food is meat?, Do you think that this food is healthy?. In the written comments, there are comments from other teachers who say that the questions were HOTS but still in the C4 and C5 categories. Other teachers gave written feedback that some of the statements made included C6. In addition, the tutor added that the teachers had made HOTS-based questions with the categories of analysis and evaluation.

In short, the teachers have made HOTS-based questions through multimodal feedback. Feedback is done in peers, oral or conference, and written. In this case, the tutor provided feedback both orally and in writing. Orally/conferences, tutors used the Zoom cloud meeting application, while in writing, tutors provided feedback through “new comments” in Microsoft word. Teachers also did this in providing feedback to peers. However, some teachers recorded their voices verbally and then gave feedback to other friends. Meanwhile, in writing, teachers continued to use Microsoft word in a new comment or track changes feature.

**Teachers' Perception towards the training of Designing Question Multimodal Feedback**

The teachers have attended workshops to make HOTS-based English questions from socialization to posttest implementation. The researchers conducted interviews with six teachers to determine the teachers' perceptions of the training of designing HOTS-based questions through multimodal feedback. Overall the teachers gave a positive response to the training because it was something new and improved their ability to make HOTS questions through multimodal feedback. The evidence from interviews with teachers is as follows:

**Extract 1**

**Researcher:** Was the process in the workshop useful? Please explain what the benefits are?

**Teacher 1:** Yes. This workshop provides useful knowledge about how to design HOTS questions. I am so happy that I didn’t know, but now I know.

In the interview excerpt in extract 1, the Teacher positively commented on the workshop because it provided extraordinary benefits on how to design HOTS questions. As proof teacher 1 said, “this workshop provides useful knowledge about how to design HOTS questions” This did not only happen to Teacher 1, but also to other teachers. These are not listed all because they have the same answer.

**Extract 2**

**Researcher:** Do you think there is a need for sharing feedback after the question-making process is completed? Why?

**Teacher:** Yes, it is very necessary because sharing feedback, both among teachers and with tutors, can improve my ability to design HOTS questions.

Extract 2 shows that feedback is useful for English teachers. With feedback from the tutor, the Teacher knows what is lacking and ensures that the questions he or she makes are HOTS or not. As the Teacher said, “Yes, it is very necessary, because sharing feedback, both among teachers and with tutors, can improve my ability to design HOTS questions”. In short, sharing feedback is very useful. In addition,
feedback between friends is also very beneficial for teachers because friends who have more knowledge about HOTS can provide good input to teachers who still don’t really understand how to make HOTS-based questions. This is by the results of teacher interviews, which stated, “Yes, it is useful, sir, because this feedback contains the advantages and disadvantages of the questions I made. I can get suggestions and constructive criticism from other teachers on the questions I make”.

Extract 3:

Researcher : What are the shortcomings of the feedback given by your peers?
Teacher 1 : Incidentally, my teacher friend has no shortage of giving feedback.
Teacher 4 : The feedback was negative, such as exploring more in the C5 and C6 sections and saying that the questions made were HOTS but still in the C4 category. In addition, other questions were still in the LOTS category.

Extract 3 shows that most teachers have given positive feedback to their peers. For Teacher 1, more or less the same comments were also obtained by other teachers. As the Teacher said, “my teacher friend has no shortage of giving feedback”. However, other teacher friends received criticism that the questions were classified as HOTS, but C4 and other questions were still in the LOTS category. As the said, “that the questions made were HOTS but still in the C4 category. In addition, there were other questions still in the LOTS category”.

Extract 4

Researcher: Do you use the feedback given by your peers to revise the questions you have made? Which parts? For example?
Teacher : Yes, I do. For example, grammatical errors and inappropriate use of words that should have been C4 instead I made with words that were in C2 like what do you mean by? I should have used Why.

Extract 4 shows that the teachers used the feedback given by their friends or tutors in revising the HOTS-based English questions that were made. This feedback is very useful to make the question really HOTS. This is by the statement of one Teacher, “Yes, I do. For example, grammatical errors and inappropriate use of words that should have been C4 instead I made with words that were in C2 like what do you mean by? I should have used Why”. This Teacher’s statement represents the statements of other teachers in answering the question because they have the same answer.

Extract 5

Researcher : Did you find the oral conference between you and your tutor useful? Why?
Teacher : Yes, it is very useful because the direct tutor orally responded to questions made right or wrong.

Extract 5 shows that oral conference, which is one type of feedback given by the tutor to teachers, is very useful because the feedback directly evaluated the results of HOTS-based questions that the teachers have made. This is by the statement from the teacher “Yes, it is very useful because the direct tutor orally responded to questions that were made right or wrong”. Other teachers also share the same opinion that comments or feedback from tutors are beneficial.

Extract 6

Researcher: What are the shortcomings of the oral conference feedback provided by the tutor?
Teacher 1 : No shortage. Everything is clear.
Teacher 3 : In my personal opinion, the HOTS-based questions in the form of essays are very clear, but for the questions in the form of multiple-choice, it is not very clear in making them.

Extract 6 shows that there are two positive and negative opinions on the question regarding the shortage of tutors in giving oral conferences that is teacher 1 said that the explanation was clear and there were no shortcomings, but the other Teacher argued that it was still unclear in providing examples of HOTS-based questions in the form of multiple choice. This is by the Teacher’s statement, “in the form of multiple-choice it is not very clear in making them.”
Extract 7

Researcher: Do you think the process of “sharing multimodal feedback”, which is various types of giving feedback, is useful?

Teacher: Yes, of course, because this multimodal feedback sharing provides knowledge, both feedback from colleagues, in writing, and through oral conferences. And that made me understand more about how to find HOTS-based English questions.

Extract 7 shows that multimodal feedback positively impacts English teachers in making HOTS-based questions. This is because the teachers did get feedback from peers and tutors. In addition, if peers’ results lack feedback, the tutor will add feedback that can make the question more HOTS. As most teachers said, “multimodal feedback sharing provides knowledge, both feedback from colleagues, in writing, and through oral conferences. And that made me understand more about how to find HOTS-based English questions”.

Discussion

In this section, the researcher discussed three important things, including whether there is an increase in the quality of HOTS-based high school level English questions that teachers can make after being given Multimodal Feedback or not, how are the form of the feedback given in the draft questions that have been made and the perceptions of the teachers participating in the question-making training with Multimodal Feedback regarding the advantages and disadvantages of providing feedback to improve the quality of English questions.

The first finding was that the teachers had attended training in designing HOTS-based English questions with tutors who were experts in their fields. In addition, the teachers had also been given a test both before the training event began and after the training activity was complete. The test contains the same questions, which instructed teachers to make HOTS-based English questions. The test results show an improvement in the teachers’ ability to design HOTS-based English questions. The average score at the time of the pretest was 69.36, while at the posttest was 81.33. This is evidenced by the increase in the average score of the teachers at the pretest and posttest. The increase in this score shows that English teachers, in general, have changed their ability to design questions so that the quality of the questions becomes better. Therefore, the treatment given in training in designing HOTS-based questions can provide additional knowledge so that there is a change in test results. As Varderber, Sellnow, and Varderber (2012) stated, training is an activity that is useful for improving one’s ability to do something. In this context, it is training to make HOTS-based English questions. Then, this training helps teachers to improve their knowledge about HOTS from the C4 until C6 (Krathwohl, 2002). Previous studies also discuss multimodal feedback, but this research focuses on improving the quality of prospective teachers and not experienced teachers. Meanwhile, this training was attended by teachers. The research results also do not provide an explanation of the test results, but only in the form of interview results that state that there is an increase experienced by the prospective Teacher (Yusuf et al., 2017).

The second finding, the form of feedback obtained by the teachers during the training was peer feedback, conference, and written feedback. In peer feedback, the teachers give each other the results of the questions that have been made to their friends. In this case, teachers would get feedback from fellow teachers who have the same material on designing HOTS-based English questions. In this section, the teachers were very happy because they got positive and negative feedback from their peers. As for positive comments like “the questions that have been made are included in the HOTS question category, the question is why do you like this food”. However, some teachers still got feedback that is not in accordance with the HOTS questions, such as the questions that have been made in accordance with good grammar, but these are still in the LOTS category, like could you mention what kinds of foods are in the picture?. This, of course, does not make teachers give up if they get bad feedback, but they immediately made revisions so that the questions are HOTS-based. Furthermore, the teachers also get
feedback from the tutor orally, or we can call it a conference. Tutors provided feedback by a conference in two parts. In the first part, the tutor provided feedback when the tutor gave general training to all participants. The second is when all teachers completed group work and got feedback from peers about HOTS-based English questions. With this additional feedback, teachers felt more confident and gained knowledge from tutors. Tutors or presenters mostly provided positive feedback on the teachers' work. However, it is undeniable that tutors also want more where most teachers make C4 and C5 questions, while tutors want to see many teachers make HOTS-based questions with level C6 or create. This verbal feedback was provided through voice recordings and zoom cloud meetings.

In addition to peer feedback and conferences, English teachers also received written feedback from peers and tutors on the HOTS-based English questions made. With written feedback, it becomes one of the lessons for English teachers because tutors and colleagues carried out feedback in written form through the MS Word application with the feature of “Comment” or “Track Changes”. The feedback results in written form became notes that are always stored and remembered by the teachers. As Srichanyachon (2012) also said, written feedback can help teachers remember what has been done in writing, either weakness or strength. Similar to the oral conference, most teachers got positive feedback on the questions made, but tutors and peers still gave negative feedback, but the feedback becomes constructive criticism so that the teachers immediately correct the questions that are made into HOTS. This second finding regarding the form of feedback is similar to previous research. Previous studies have used feedback, but previous studies have emphasized feedback in terms of writing or other English skills that focus on students. However, recent research still uses feedback, but multimodal that focuses on teachers. In this case, feedback is very useful for participants who are given feedback for quality improvement (Anasy, 2016; Ferguson, 2011) Furthermore, with the discovery of forms of feedback that occurred in this study, this is in accordance with the application of the theory regarding multimodal feedback, which the feedback is given not only in oral conferences, in writing, but also through colleagues (Bartels, 2003; Hyland & Hyland, 2001; Sun et al., 2010)

The third finding, the perception of most English teachers’ perception of the training in making questions using Multimodal Feedback, is positive after the researcher conducted interviews with several teachers. The teachers found this activity very useful for them. With the training, teachers are able to increase their knowledge of how to make correct HOTS-based questions using multimodal feedback. This is by one of the Teacher’s statements “Yes, of course, because this multimodal feedback sharing provides knowledge, both feedback from colleagues, in writing, and through oral conferences. And that made me understand more about how to find HOTS-based English questions”. In addition, teachers not only get feedback from tutors but also from peers. In this case, this training maximizes the abilities possessed by the teachers so that if there are errors in making questions, the questions are immediately revised by the teachers concerned. This finding is certainly in line with Dyan (2017), who found that teachers gave positive perceptions of multimodal feedback. However, Phillips, Henderson, Ryan (2016) thought that multimodal feedback was not always clear, which is in contrast with this finding of the research.

In addition to the findings, some teachers gave constructive comments in terms of improving the quality of this training. Some teachers thought that this training should be longer in duration. Moreover, one teacher also thought that the HOTS-based English questions in the form of multiple choice or multiple choice should be explained and implemented more because the questions have been made in the form of essays so far. This is by the words of one teacher “in the form of multiple-choice is still not too clear how to make it.” With the response regarding this matter, some notes and perceptions are not positive about implementing this training. Of course, this is contrary to Dyan (2017), where all participants gave positive responses. This becomes a note for the researcher and the tutor to make the next training better.

Briefly, the findings in this study are different from previous studies where the research produced several findings, such as improving the quality of HOTS-based English questions through tests. Most participants have positive perceptions, although there are still negative perceptions. Besides, the form of the feedback is given to English teachers varied, including peer feedback, written, oral, and conference. The main thing that distinguishes the results of this study is that participants were trained
to make HOTS-based English questions. Although this research looks perfect, some limitations can be considered for further investigation. It can focus on multiple-choice questions. This is because the questions made during the training are mostly essays.

4. CONCLUSION

In conclusion, there was a quality improvement of HOTS-based English questions. This is evidenced by an increase in the overall average score on the pretest and posttest conducted by English teachers. Then, the form of feedback used by the teachers during the training was multimodal feedback using oral conferences, peers, and writing. Furthermore, most teachers give a positive perception of designing HOTS-based English questions because they think that this activity adds knowledge and has an output in the form of HOTS-based English questions.

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