

Chapter Four

Findings and Discussion

This chapter presents the findings of this research and also the discussion. In this chapter, the researcher connects the findings with the related literature. There are two main findings described in this part in details. The first main finding answers the first research question which is about the teachers' guidelines in designing MCQs for the English assessment. The second main finding answers the second research question which is about the teachers' challenges in applying their guidelines in designing MCQs for English assessment.

Teachers' Guideline in Designing MCQs for the English Assessment

In this part, there are fourteen findings gathered by the researcher by interviewing the participants about the teachers' guidelines used in designing MCQs for the English assessment in one private high-school in Yogyakarta. All of the guidelines are reported in the following explanations:

Finding 1. The teachers used the correct grammar. The first guideline used by the teachers was the teachers used correct grammar in designing MCQs. In designing MCQs, the teachers must use the correct grammar both in the questions and distractors. This statement was mentioned by Rose, the first participant. Rose stated, "there are many guidelines, one of them is I used the correct grammar" (P1.22). Based on this statement, it indicated that using the correct grammar is one of important things in designing MCQs.

This finding is in line with Jennings (2012) who said that in designing MCQs, teachers have to make sure that they use appropriate grammar both in questions and options. By using the correct grammar, the students can take the assessment seriously, and it can decrease the ambiguity of MCQs item. Burton,

Sudweeks, Merrill, and Wood (1991) stated that the teachers must use grammar, spelling, and punctuation appropriately in the items. It can reduce the ambiguity of the item which makes the students misunderstand the items. It also makes the students more seriously in taking the assessment.

Finding 2. The materials were in accordance with the indicator. The second finding was the materials used as the item of MCQs were in accordance with the indicator. It was mentioned by the first and second participant. The first participant stated, “Then, the materials used must be in accordance with the indicator” (P1.23). The second participant also stated, “The questions must be in accordance with the indicator” (P2.19). From those statement, it can be seen that indicator is one of the important things that teachers must be pay attention.

This finding is in line with Karwapi (2008) who stated that the item of MCQs must ask the materials that are tested in accordance with the indicators. It is because through this indicator the teachers can know whether the learning objectives are achieved or not. Angga (2014) stated that indicator is an indication that the specifed competence that has been achieved. Therefore, if the teachers want to know whether the learning objectives has been achieved or not, the teachers must design the materials of MCQs in accordance with the indicators.

Finding 3. The option materials must be homogeneous and logical. The third finding was the materials of the option must be homogeneous and logical. It could be inferred that all of the materials used in the options must be from the same materials used in the question. Both of the participants, Rose and Jasmine stated this finding. Rose stated, “the options must be homogeneous. It must be from the same materials according to the questions” (P1.24). Jasmine also stated, “the question must be logical and homogenous” (P2.20). This finding is in line

with Burton, Sudweeks, Merrill, and Wood (1991) who stated that to design good MCQs, teachers must keep the options homogeneous. It means that the teachers make the options that are related to the stem, other options, and the options must be paralleled with the design of good MCQs so that the students are not confused in answering the question.

Finding 4. In designing MCQs, there is only used the necessary statement. The fourth finding in designing MCQs was the teacher must used only the necessary statement. Based on the interview result, in designing MCQs, the teachers must used only the necessary statement both in the questions and options. If the teachers included sentences that did not relate to questions or options, it made the students confused. This statement was mentioned by both of the participants. The first participant stated, “then, in designing the questions, we must used only the necessary statements” (P1.25). The second participant also stated, “then, the last is only used the necessary statements either for the question or the options” (P2.31). This finding is in line with Collins (2006) who stated that the stem or the questions must include only the necessary information, and it should not be over wordy. It means that in designing good MCQs, the stem must not include unnecessary information that will not be assessed and only increased the student’s difficulty to answer the question.

Finding 5. To design good MCQs, the teachers did not make questions that gave clues to the correct answer for the students. The next finding based on the interview result was the teachers did not make questions that provided a clue to the correct answer. It could be said that in designing the question, the teachers did not use words or sentences that lead the students to the correct answer. This finding was stated by both of participants. The first participant

stated, “then, did not design questions that gave clues to the correct answer for the students” (P1.26). The second participant also stated, “did not design the questions that gave clue that lead the students to the correct answer” (P2.29). This finding is in line with Burton, Sudweeks, Merrill, and Wood (1991) who stated that teachers do not design tasks which give clues to the correct answer. Teachers must write MCQs well, because bad written of MCQs can increase the students’ chance as they do not know the correct answer to guess.

Finding 6. Teachers must use a clear and functional chart, table, picture, graph or diagram. The next finding was if the teachers used a chart, table, or picture in the question, they must be functional and clear. Rose stated that if the teachers used a chart, graphic, or table, they must be clear and functional not only as embellishment which only made the student confused. It could be inferred that in designing MCQs, the teachers only presented a chart, table, or picture which related to the question. Jasmine also said that the picture, graphic, table, or diagram should be clear if the teacher used them. This statement was stated by both of the participants. Rose stated, “if we used a chart, table, or picture, it must be functional and clear not only as embellishment which can made the students confused” (P1.27). Jasmine also stated, “next, if we used like the picture, graph, table, or diagram, all of them must be clear” (P2.24). This finding is in line with Zaim (2016) who stated that in designing MCQs, the picture, graphic, table, or diagram should be clear and functional. These elements must be clear, meaning that it is easy for the students to read and understand the question. The picture, graphic, table, and diagram must be functional, meaning that it related to the question.

Finding 7. In designing MCQs, teachers did not make a question depended on the answer of the previous question. The seventh finding was the questions did not depend on the answer of the previous questions. It indicated that the teachers must avoid to design the question providing the answer for other questions, because there was student who could not answer the previous questions correctly so that they also could not answer the next question correctly. Based on the interview result, the two participants, Rose and Jasmine mentioned this finding. Rose stated, “did not made a question depended on the previous question” (P1.28). Jasmine also stated, “the question did not depend on the answer of the previous question, it sometimes happens in MCQs, so it must be avoided” (P2.25). This finding is in line with the guideline suggested by Jennings (2012). Jennings stated that teachers should create questions independently. It means that in designing MCQs the teachers should avoid creating a series of questions that may provide an answer for another question.

Finding 8. Book of scoring technique. The next data obtained from the interview was the teacher also used scoring technique book. This book helped the teachers in scoring process of the students’ learning outcomes. Based on the interview result, only Jasmine mentioned about this guideline. She stated that the teacher also used scoring technique book. This book contains scoring technique of MCQs which is different from essay test. In this book, there are two process of scoring technique of MCQs. The first is scoring technique by considering the students answer. In this technique, the teacher gave the score to the students by considering the questions were answered correctly and not answered by the students. The second technique is scoring technique without considering the students answer. It could be inferred that the teacher gave the score by giving the

score for every correct answer, or the score was obtained by counting the number of the correct answers. In addition, Jasmine also stated that scoring technique book also includes three criteria in scoring such as the scoring of the social and spiritual attitudes, cognitive, and skills. Jasmine stated “I use a book of scoring techniques that includes MCQs scoring technique that is different from essay test and three criteria of student scoring which consist of social and spiritual attitudes, knowledge and cognitive aspect, and skills or practice. Scoring process of MCQs can be done by using two ways which consists of scoring process without correcting the answer and by correcting the answer ”(P2.17).

This finding is in line with Mucle (2012) who stated that the teachers must use book of scoring technique to give score accurately. Based on the interview result the second participants stated that there are two ways of scoring techniques of MCQs. It is in contrast with Mucle (2012) who said that there are three techniques to give score of MCQs which consists of techniques to score the result of MCQs that consist of scoring technique without correcting the answer, with correcting the answer, and with different score of the items.

Finding 9. In designing good MCQs, every question must have one correct answer. The ninth finding based on the interview result was every question must have one correct answer. It could be inferred that in designing MCQs, there must be one best answer of several options presented in MCQs. This finding was mentioned by the second participant, Jasmine. Jasmine stated, “then, of course every questions must have one correct answer” (P2.21). This finding is in line with Burton, Sudweeks, Merrill, and Wood (1991) who stated that good MCQs should have one or only one correct or clearly correct answer. In designing MCQs, the teachers have to make sure that for every question only has one correct

answer. If the teachers make question with more than one the correct answers, it must have one clearly best answer.

Finding 10. The teachers made clear question. The next finding was the questions must be clear. Jasmine stated that the question must be presented clearly to make the students easy to understand. This statement was stated by the second participant. The second participant stated, “in the construction guideline, the most important thing is the question should be clear, so that the students understand what we mean” (P2.22).

This finding is in line with the statement of two scholars. The first scholar, Cheung and Bucat (2002) stated that in designing MCQs, the question or stem should be meaningful and should state a clear problem. The second scholar, Jennings (2012) also stated that in designing MCQs, the question should be concise and clear. The question that presents a clear question can reduce the students’ confusion. The students’ burden will also reduce if the questions are presented concisely.

Finding 11. The statements such as “all of the above” or “none of the above” must be avoided by teachers in designing MCQs. The eleventh finding was the teachers must avoid using the statements “all of the above” or “none of the above”. Based on the result of the interview, in designing MCQs, the statements “all of the above” or “none of the above” were not used both in the question or options. This finding was stated by the second participant. The second participant stated, “next, avoid using the statements like all of the above or none of above” (P2.23).

This finding is in line with the guideline stated by Cheung and Bucat (2002) in their research which is about construct good multiple-choice items. They stated that the use of *none of the above* and *all of the above* as options in MCQ items is appealing for many teachers because they appear to fit easily into many items. However, many measurement experts do not suggest the use of these statements.

Finding 12. The teachers did not place the correct answer in the same position. The twelfth finding about the guideline that used by teachers in English assessment was the teachers did not place the correct answer in the same order. Based on the interview result, in designing MCQs, the teachers must keep the correct answer in a random order. It was done to avoid the students to be able to detect the correct answer. This finding was mentioned by Jasmine. Jasmine stated, “the placement of the correct answer should also be considered, do not place the correct answer in the same position for example from number one until the last number, the correct answer is C, it will make the students easy in guessing the correct answer” (P2.26). From that statement, it can be seen that teachers place the correct options randomly. This finding is in line with Burton, Sudweeks, Merrill, and Wood (1991) who stated that to design a good question, teachers should place the correct answer randomly.

Finding 13. The length of the option sentence should be same. The thirteenth finding was the length of the option sentence was same. Based on the interview result, in designing the options of MCQs, the teachers must keep all of the options in the same or similar length. Usually, the longest sentence is the correct answer, and it made the students to select it. This finding was said by

Jasmine. Jasmine stated, “then, in designing the option, the length of the sentence used should be same, because it is to avoid the students to think that the correct answer is the longest sentence” (P2.27). This finding is in line with Towns (2014) who stated that in writing the correct options of MCQs, the teachers should keep the options in the same length. It is to avoid the students to assume the correct answer is the shorter or longer option. It means that the teachers should design the option as similar as possible with the correct answer.

Finding 14. Used communicative language. The last finding was using communicative language. It inferred that the teachers must use the easy language for the students to make them easy to understand. Using communicative language as guideline in designing MCQs was mentioned by Jasmine. Jasmine stated, “use communicative language” (P2.30). This finding is in line with Collins (2006) who stated that to design good MCQs, the language used by the teacher in MCQs should be communicative. It means that the teachers should use the language that is easy to be understood by the students so that the meaning of the questions can be conveyed correctly, and the students can answer the question correctly.

In conclusion, based on the finding above, the researcher found that there are fourteen guidelines used by teachers in one private high-school in Yogyakarta. The guidelines are teachers used the correct grammar; the teachers used the materials in accordance with the indicator; the option materials used must be homogeneous and logical; teachers used only the necessary statement; teachers did not make questions that gave clues to the correct answer; teachers used a clear and functional chart, table, picture, graph, or diagram; teachers did not make a question depended on the answer of previous question; the teachers used book of scoring technique; every question must have only one correct answer; the teachers

designed question clearly; the teachers did not place the correct answer in the same position; the teachers designed the option sentence same in the length, and the teachers used communicative language. All of the guidelines made the teachers easy in designing MCQs, because the teacher followed the guidelines to design a good MCQs. By following these rules, the teachers were able to design good MCQs which valid and reliable to measure the students' abilities. Moreover, these guidelines were also as the criteria to make a good question so that by looking at these guidelines, the teachers knew whether the questions they made included in the category of good questions or not.

Teachers' Challenges in Applying Their Guidelines in Designing MCQs for the English Assessment

Based on the interview result, the participants mentioned the challenges that they face in applying their guidelines in designing a good MCQs. There are five findings about the challenges faced by the teachers in designing MCQs which are explained in detail in this part. The explanations are presented below:

Finding 1. Designing a good MCQs takes a long time. The first challenge collected from the interview was designing MCQs takes a long time. Designing a good MCQs is not easy. One of the challenges is about time. Based on the interview result, both of participants, Rose and Jasmine stated that the time became the challenge for the teachers in designing a good MCQs, because designing MCQs took a long time. Rose stated, "The challenges is that it takes a long time to write or design the questions of MCQs, because there are a lot of things that should be considered"(P1.32). Jasmine also stated, "The challenges in designing MCQs is it takes a long time"(P2.36). Based on these statements, it can

be concluded that they need more time to design a good MCQs, because there are many things that must be paid attention .

This finding is in line with the challenge stated by Priyambodo and Marfuatun (2016). They mentioned that in designing MCQs, teachers need more time to design MCQs. It means that designing good MCQs is time consuming. In designing a good MCQs, the teachers needed around 10 up to 20 minutes only to make one question. It is because they should note and follow the guidelines in designing good MCQs. Rose and Jasmine said about this. Rose stated, “I need around 20 minutes” (P1.12). The second participant also stated, “around 10 up to 20 minutes” (P2.11). It is in contrast with the statement of Reichert (2011) who argued that to design MCQ items, teachers usually need around one hour to create one item of MCQ.

Finding 2. Made an effective and a functional distractor. The second finding was made an effective and a functional distractor. It could be inferred that distractor must be able to make the students more interested in selecting distractor than the correct answer. Based on the interview result, the two participants, Rose and Jasmine mentioned that designing distractor was difficult and became the challenge for the teachers in designing MCQs. Rose stated, “The challenge is to make an effective and functional distractor” (P1.33). Jasmine also stated, “It is difficult to make distractor” (P2.37). From the two statements, it indicated that distractor became one of the signals of the achievement of the learning objectives. This finding is in line with Priyambodo and Marfuatun (2016) who stated that the most difficult part in designing MCQs item is making plausible distractors. It is because the quality of the distractor can influence the quality of the MCQs item.

Finding 3. There were a lot of number of MCQs. The third finding was there were a lot of number of MCQs. Based on the interview result, Rose stated that the number of the questions were the challenges for the teacher in designing MCQs. Rose stated, “Then, there are a lot of number of the MCQs” (P1.34). Rose added that the number of the question were made in the mid-term examination were 25 questions and 50 questions in final examination. Rose stated, “in mid-term examination of the semester, there are 25 questions of MCQs” (P1.20). Rose also stated, “in the final examination, there are 50 questions of the MCQs” (P1.21). In addition, Jasmine stated, “I made 20 questions in the daily test, 25 questions in mid-term examination, and in final examination there are 40 up to 50 questions”(P2.16). It can be concluded that the number of MCQs became of the challenges for the teachers, because in every test they made MCQs with considerable amount.

Finding 4. There was no guidance of senior teacher in applying the guidelines. The fourth finding was there was no guidance of senior teacher in applying the guidelines. Based on the interview result, Jasmine stated that it was difficult for the teachers in applying the guidelines in designing MCQs without guidance from senior teacher. Jasmine stated, “the challenge is that there is the difficulty, it means that the difficulty in applying the guidelines without the guidance of senior teacher” (P2.32). From that statement it can be seen that the role of senior teacher is important to guide the teacher in designing MCQs.

This finding is in line with Komunika (2015) who stated that a challenge for the teacher to design reliable and valid MCQs is if there is no guidance from the senior teacher. It is because to design a reliable and valid MCQs, the teachers need the expert person who can guide them so that they need the senior teacher to

guide them. One of the roles of senior teacher is giving guidance for the teacher in designing assessment. Osnal, Suhartoni, and Wahyudi (2016) stated that senior teachers have an important role to mentor, supervise, give professional support, give counselling, and guide the teachers in designing a good assessment. It indicated that the role of senior teacher is important for the teachers to design reliable and valid MCQs.

Finding 5. Teachers made the question that did not provide the clue to the correct answer to the students. The last finding gathered based on the interview result about the teachers' challenges in designing MCQs was the question did not provide clues to the correct answer. In order to design a good MCQs, the teacher felt that designing the questions that did not provide clues to the correct answer became the challenge to design a good MCQs. This statement was mentioned by the second participant. Jasmine stated, "Then, make the questions that do not provide the clue about the correct answer to the students, so that sometimes the correct answer can be guessed by the students, although the material has not been taught, because there is a clue about the correct answer" (P2.38). From that statement, it can be seen that designing question that did not provide the clue to the correct answer is difficult to design. This finding is in line with this Ibbett and Wheldon (2016) who stated that it is a challenge for the teachers to design MCQs that do not provide the clue to the correct answer.

From the challenges above, there are five challenges faced by teachers in one private high-school in Yogyakarta. The challenges are designing a good MCQs took a long time, made an effective and a functional distractor, there are a lot of number of MCQs, there is no guidance of senior teacher in applying the

guidelines, and teachers made the question that did not provide the clue to the correct answer to the students.

Micro Finding

In this part, the researcher presents additional findings based on the interview result related to this research. This part contains the teachers' solutions to solve the challenges in applying their own guidelines in designing MCQs. There are three ways of the teachers to solve those challenges.

The teacher's ways to solve the challenges. Based on the interview result, there are three ways of teachers to solve the challenges they faced. The findings are discussed below:

Sharing information with other teachers. The first finding gathered by the researcher about the teacher's way is the teachers solve their challenges by sharing information with other teacher. They did not only discuss their challenges or difficulties they faced in applying their guidelines in designing MCQs with other English teachers, but they also discussed with teachers of other subjects. This statement was mentioned by both of the participants. Rose stated, "the way to solve this problem is sharing information with other teachers not only with the English teacher, but also with the teachers of other subject" (P1.37). Jasmine also stated that "sharing with colleagues" (P2.42). From those statements, it can be concluded that the teachers solve their challenges through the idea expressed from their colleagues. This finding is in line with Osnal, Suhartoni, and Wahyudi (2016) who stated that in designing MCQs, teachers can work together with senior teachers, their colleagues, or it can be constructed in *Kelompok Kerja Guru* (KKG). It means that they can share their problems with senior teacher, their

colleagues and in KKG. It helped the teachers to solve the challenges in designing MCQs.

The problems were discussed in KKG. Discussing the challenges in KKG was the second way for the teachers to solve the challenges they faced. In this group, the teachers could share the things related to the teaching and learning process. One of the things discussed in this group was the challenges or difficulties in designing a good assessment especially MCQs. This statement was mentioned by both of the participants. The first participant stated, “then, the problems that we addressed were discussed in KKG” (P1.38). The second participant also stated, “and the challenges were solved in KKG” (P2.43). In this group, the teachers did not only discuss about the challenges, but they also practiced to design MCQs by using the correct grammar and according to *Kompetensi Dasar (KD)*. The statement was stated by the second participant. Jasmine stated, “in group, we discuss and exercise to make MCQs in accordance with the basic competence” (P2.44). Jasmine also added, “and make MCQs by using the correct grammar and punctuations” (P2.45).

This finding is in line with Osnal, Suhartoni, and Wahyudi (2016) who stated that MCQs can be constructed together by senior teacher, their colleagues, and it can be constructed in KKG. It means that in KKG, teachers can share and solve their problems faced in designing MCQ. KKG is important part in education. Komunika (2015) added that KKG has important role to develop the quality of the education. Through KKG, the teachers’ competency will be increased so that the teachers are able to design a good assessment.

Asking the headmaster. To solve these challenges, the teachers did not only discuss with their colleagues, but they also asked the headmaster in their school. This statement was mentioned by the second participant. Jasmine stated, “to overcome the challenges, I ask the headmaster” (P2.41). This way helped the teachers to solve these challenges through the idea from the headmaster. This finding is in line with Osnal, Suhartoni, and Wahyudi (2016) who stated that the headmaster has the responsibility in mentoring, supervising, supporting, and guiding the other teacher. It means that the teachers can ask the headmaster for helps to solve the challenges in designing MCQs.

In conclusion, there are three ways used by teachers in one private high-school in Yogyakarta. The ways are by sharing information with the colleagues, solving the challenges by discussing the problems they faced in KKG, and solving the challenges by asking the headmaster. These ways helped the teachers to design good MCQs that appropriate to assess the student’s cognitive abilities.