

USING STIMULATED RECALL METHOD IN UNDERSTANDING TEACHER INTERACTIVE DECISION MAKING

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ABSTRACT

This study sheds lights on whether Stimulated Recall (SR) as data collection method can gain accurate information if the recall is not conducted immediately after the task is completed. This study emerges from a research conducted previously about teacher decision making regarding their language use which is a dissertation writing and is not published yet. This paper is to investigate whether it is applicable to recall thought processes of teacher interactive decision making. This study applies interpretative method which uses documents of classroom observation video transcription and post observation interview transcription as data. The result is it is beneficial to use SR as data collection method since it can gain information accurately to recall the thought processes of teacher interactive decision making. It can work well to collect the data if SR is conducted based on the recommendations proposed by Gass and Mackay (2000) which are time, strong stimulus, good training for the research participants, and consistency with research questions.

Key words: Stimulated Recall, teacher interactive decision making, data collection method

ABSTRAK

Penelitian ini mendiskusikan tentang Stimulated Recall (SR) sebagai salah satu metode pengumpulan data yang memiliki keterbatasan pada waktu pengumpulan data. Penelitian ini didasarkan pada penelitian sebelumnya yang menggunakan metode pengumpulan data SR. Berdasarkan pengalaman empiris tentang waktu pengumpulan data menggunakan metode ini yaitu dimana semakin lama interval waktu antara selsainya kegiatan dengan pengambilan informasi tentang kegiatan tersebut, semakin diragukan reliabilitas data. Hal ini berhubungan dengan daya ingat partisipan tentang kegiatan yang telah dilakukan. Maka masalah yang muncul adalah apakah informasi yang didapat masih akurat dan berguna untuk analisis penelitian ketika data yang dikumpulkan dengan menggunakan wawancara dilakukan seminggu setelah kegiatan dilaksanakan, dan apakah SR dapat mengungkap proses mental pengajar ketika pengambilan keputusan terjadi. Dengan menggunakan video sebagai stimulus dan melakukan wawancara sebagai cara untuk mendapatkan informasi, SR terbukti dapat digunakan untuk mengungkap mental proses dalam pengambilan keputusan dalam mengajar dan informasi yang didapat akurat. Hal ini dapat berlaku berdasarkan kondisi (1) waktu; (2) stimulus yang kuat; (3) pelatihan; (4) konsistensi pada langkah penelitian.

Kata kunci: Stimulated Recall, pengambilan keputusan guru, metode pengumpulan data

INTRODUCTION

Stimulated recall is one of the methods to collect the data in conducting research. It is defined as a procedure for collecting introspective data that is to elicit the thought processes in carrying a task or activity. It is used after the event under investigation. It is not conducted concurrently. In this way, the participants are not distracted by having to introspect during the task. It is supposedly that the record of their activities can stimulate their memories to produce good introspective data after the event. Introspective is the process of observing and reporting on one's feeling, thought, motives, reasons, and mental states. It is often with a view to determining the ways in which the processes and state shape one's behavior (Gass & Mackey, 2000; Nunan, 2009; Barnard and Burns, 2007).

It can be used to recall the thoughts of the participants of the research. The theoretical foundation for stimulated recall lies on an information-processing approach. The use and the aspects to memory structures is enhanced if not by a prompt that assists the participants of the research to retrieve the information (Gass & Mackey, 2000).

Stimulated recall (SR, henceforth) is used to explore aspects of cognition that lie behind the participants' decisions and actions. It is used to explore teacher cognition (Polio *et al.*, 2006). The introspective data collection is divided into two: think-aloud protocol and stimulated recall. Think aloud-protocol is a type of introspective data in which the participants complete a task or solve the problem and verbalize their thought process as they do. It involves verbal concurrent introspection. As the participants think aloud, his self-report is audio-taped or video-taped recorded. It is then transcribed and the written result named as protocol.

Barnard and Burns add that this method is used to elicit qualitative data related to the thought processes associated with the performing an action or participating in an event. A stimulus in the form of video recording is used as the instrument of this method. Cohen and Hesenfeld categorize the introspective data collection which is based on the timing of the event being investigated. The first is concurrent introspection which represents a particular point in time or during the event. The second is immediate retrospection which occurs right after the event and the delayed retrospection which occurs in the following classes. Shavelson (1982) writes that most of the research on teachers' decisions and behavior while interactive teaching applies the method of stimulated recall. Research using this method finds that teachers' plans function as scripts that guide teachers in interactive teaching. These plans become teachers' routines.

Teaching involves making decision. Before teaching, teachers need to plan what to do in the classroom. Decisions that are made in this stage are called by planning decision. During teaching, a decision making is involved. Teachers need to make on the spot decision regarding different aspects of the lesson that are not planned yet in their lesson plan. This kind of decision is categorized as interactive decision. After teaching, the teachers do retrospection about what teachers have done and use that evaluation for the next sessions. It involves decision concerning what to use and what to leave for the following class. This type of decision is called evaluative decision. It provides insights to planning decision for the following class or subsequent occasions (Richards, 1988).

Walsh (2011) notes that one of the characteristics of good teaching is good decision making. Good teachers make good interactive decisions which are appropriate at the moment, engage learners and facilitate learning and learning opportunity. Teachers get credits for teaching to the plan and are criticized for deviating from what they plan. However, Bailey offers a helpful alternative approach and focuses in the decisions made during teaching. Interactive decision is more important rather than what are planned before if teachers find problems during teaching and it needs to be solved soon. Interactive decision making is done in while teaching. Teachers do it based on the changes needed for lesson is dynamic. Accordingly, teachers base their judgment on their cognition about good teaching. The result of retrospection provides insights for teachers to planning decision for their subsequent classes.

Teachers' interactive teaching is characterized by carrying out established routines. They monitor whether or not the activities run well based on the plan or immediate actions are decided based on the problems that occur at that time. Teachers do actions based on their previous experiences or they react spontaneously to manage the problems that happen in the classroom and continue the routines. In one case, the immediate actions are not taken, teachers keep in the memory and use that experience for the future planning. In this case, it is the evaluation for them to teach the next session. Whitfield (1874) in Calderhead (1981) believes that decisions occur during classroom interaction involve the issues of: (1) implementation and/or modification of pre-lesson decisions; (2) language structure: level, vocabulary, illustration and questions; (3) number and type of examples; (4) error correction and lesson elaboration; (5) motivating particular children to participate in the various lesson activities; (6) discipline and social control; (8) pacing the lesson with respect to time.

SR as a data collection method has pitfalls regarding the time. A crucial assumption of SR is the accuracy of the information gained. Bloom (1954) quoted by Gass and Mackay

finds that the recall should be done immediately after the activity is finished. He states that it is generally in 48 hours the information gathered is still reliable. If it is more than that it is considered unreliable. Therefore, the recommendations are given to maximize the reliability of the information gained. Gass and Mackay (2000) suggest the procedure regarding time, strength, training, and structure of the method. Related time, the data should be collected as soon as possible after the event. However, they do not mention the limitation of time. They say as the event becomes more distant in time and memory and there is a chance that the event is sharply focused in the memory. Strength is related to stimulus. The use of video is recommended. If it is more delayed, they can watch a video and even read the transcripts of the episodes they need. The participants should be informed the procedure before the research; therefore, they are well-prepared. The SR is done based on the problem of the research. It should be prepared and structured to gain the useful data. The researcher should prepare the steps well.

The previous study regarding the use of SR as a data collection technique is conducted by Radisic and Baucal (2016). The study conducted emerging from a research project exploring teachers' belief in math classes results the use of stimulated recall interview using video helps them understand teachers' belief and classroom practices.

SR has requirements to be applied as a tool for data collection method. This study tries to reveal whether SR can gain the information accurately since the recall is done a week after the task. Additionally, it is to shed lights on whether or not it is applicable to recall the thought processes of teacher interactive decision making.

RESEARCH METHOD

This study emerges from a research conducted previously about teacher decision making regarding their language use which is a dissertation writing and is not published yet. This study applies interpretative method that describes the use of SR in uncovering teacher interactive decision making. It is to shed lights on whether or not SR can gain accuracy of information needed. Additionally, it is to investigate whether it is applicable to recall the thought processes in teacher interactive decision making. Teachers are video recorded while teaching in regular class sessions. The video recording is transcribed. Teachers are interviewed after classroom observation to confirm decision making they make in teaching. The aim is to recall the decision made by the teachers while they are teaching. Then, it is transcribed. The interview is not done right after the class observation are finished. Due to teachers' tight schedule, it is possible only a week after the class observation. The data for

this study are taken from the transcription of classroom observation of three senior teachers teaching speaking in three universities in Jakarta and the transcription of post observation interview. Those documents of video transcription and interview transcription are used to analyze the data.

Regarding validation of this technique, the videos are played and teachers watch what they do in the classrooms. While the video is played, the interview is conducted. In the case that teachers forget what they have practiced, the video in certain segments is played again in order to remind the teachers about their classroom practices. Additionally, it is stopped when teachers ask to do. It is to give teachers time to answer the questions. The play of video is not based on the interviewer plans; however, it is based on the needs of the interviewee.

RESULTS AND DISCUSSION

The first research question is whether SR can gain the information accurately when the tasks have been completed a week before. The answer is SR can reveal the information accurately. Based on evidence described following, SR is a useful technique to obtain useful data of teacher thought of interactive decision making. Teacher A still remembers what she decides in pre-speaking stage. She is in doubt and the time on the video screen shows that the activity takes more time than she remembers. The episode played reminds her that it is longer than she thought. The evidence is:

I: Okay, in this stage pre-speaking. Do you have any reason why you took a bit longer, you took time to do the review?

T : So I was taking around 10 minutes if I'm not mistaken.

I : In this video 20 minutes.

T : 20 minutes, yeah. Because first of all usually I wait until the students gather because they like to come a bit late. And then the second, since I'm going to review their assignments, so I'm just making sure of myself and also themselves whether they understand the task or whether they have done it correctly. Because the idea was taking-notes assignment so they have to choose two video clips from .com and then after that I ask them to make short notes by putting in some points.

I : So is it your routine just pick some of the paper and then discuss with them?

T: it's not actually my routine because sometimes the assignments are done at the second session, so this was actually the second time. The first one presentation.

I: Okay. It's interesting when you come to minute 24. Do you still remember when you talk about "Superman Return", "Korea talkshow".

T: Reality talkshow. Yeah I was talking about the wedding ceremony done by pre-school students to present about relationship in the family. I talked that because we were discussing about 86 years of marriage, the long lasting marriage.

Teacher can tell the reasons why she uses certain strategies to give corrective feedback for students. The episodes are played again and again if they are in doubts about what they do the tasks. Teachers initiate to go to certain episodes if they need to give evidences why they decide to do activities. Regarding types of questions, teachers decide to shift from WH-questions to Y/N questions or even the chunks. They can tell why they departure from the lesson plan they have made. It is clear that video can help the teachers recall the information.

I : In your prespeaking, you planned to have WH questions, but in reality, in your class the WH questions were changed into yes/no questions. So there would be some changes you decided to change into yes/no questions. You start by WH ws because the students didn't answer the questions, so you switch into yes/no questions. Why did you decide?

T: Well in teaching I think when the communication is stuck, put it that way, I think the teachers should really find another way to elicit according to their understanding in my opinion.

The use of Indonesian when teaching is avoidable. Teacher C does not want to use Indonesian when teaching. That is what she believes. Based on what she knows; the use of Indonesian makes students spoon fed. The students can find the unfamiliar words in the dictionary which trains them to be independent learners. However, what she plans and what she believes is inconsistent. She uses Indonesian to find the equivalent word for centipedes. The evidences are:

T : So all you need to do is to report again who is the most fearless and who is the scaredy cat. One by one first. You score yourself first.

Ss : (practicing).

T : Oh sorry guys, centipedes is not one thousand legs. It's *kelabang*. It's *kelabang not kaki seribu*.

SA: Dogs 5, needles 1, speaking in public 10, driving 1, the ocean 1, centipedes *kelabang* 5, ghosts 10, swimming 5, horses 1.

Teacher C remembers very well about what she has already planned and when the class is taught. The evidence shows that she reminds the interviewer that the class is last week not the last two weeks.

T : Hello. I have some questions about lesson plan, and then your teaching that I video taped the last two weeks.

T : Last week.

I : In prespeaking, teacher reviews the previous lesson. What do you think? Is there any change on your lesson plan while you're doing the teaching?

T : I think it goes like what I planned actually because the clues are printed there in the whiteboard, so they only need lots of review. The clues are there, right.

Teacher C can recall the information of one of the students that she thinks that she is under-achiever. She is afraid that she cannot follow the lesson.

T: And then I noted the one Sarah. The one also taking the night class, she has problems even understanding English. Because she came on weeks three.

I : The big one.

T : Yeah the big one, the one with glasses. And then she took some subjects from class B, and then only one subject from class A.

I : She's a repeater.

T: She's a transferred from other university.

It reveals that teacher C discusses the student that it is not what the interviewer asked. The questions should go back the focus. There is a tendency if the video is not used the good structure of the research, the data collected is not led or focused. The interviewer tries to go back to the research questions.

The other evidence reveals that when teacher forgets that she plans to explain the grid provided in the book. However, she decides to elaborate the grid in the next session. The lesson plan as document used for this study helps the interviewer and the teacher to lead to the information to get. The text book, the video, the lesson plan can be used as aids to avoid misunderstanding. The evidence is:

I : Yeah there is a change from your lesson plan to your teaching because in your lesson plan you provided questions. Here this one you plan to go back to the book, the questions in the book. When I interviewed you, you said that you were to provide the table.

T: The table is actually on their books.

I: The note table.

T : The note table?

I : The new one. That's okay no problem, but I asked here you change it into no table but questions. No problem with this. But you provided interesting one. You changed the table into some sentences and then last reason, examples, and etc. Do you have any reason why there is a change.

T : okay while I'm trying to remember which table that I've planned to. Because beyond the table I have this on the book, the other one. This one.

I : Yeah you planned to have it. You a bit explained me about this

T : Oh I got it, so this one actually the table provided for the second session.

I: Oh I see.

T : Yeah that's right, my plan is while I'm explaining the straw-man arguments, I'm giving pre-listening information that the listening later on will be based on the second table. So this table is talking about the life of elderly in the United States, but eventually I explain it in the second session.

I : Oh I see. So you just moved the time because it's much more related to the second session.

T : because you know at this moment I was thinking in and out whether we have enough time to explain the table *so I make the quick decision just go into the practise* and then explain about the presentation in the short time. And then well this also I put it at the second session.

I: I think that they've got already enough information in the slides.

T : That's right. I guess okay.

Here is the evidence of the use of metalinguage.

I : Do you have any reason why you move the tone here to the presentation?

T: Well, I was a little bit undecided at that time, so it was just I think part of my routines.

Teacher B understands about metalinguage as a tone used for expression learned. It is what she knows. Surprisingly, all teachers (A, B and C) think that metalinguage is to use for the tone of the expressions. They write down in their lesson plan. It is already noted down in the lesson that metalinguage is not as what they believe and think.

Ellis (2012) defines metalinguage is the language used to talk about language. Few studies examine teacher's use of metalinguage. Hu (2010) proposes four reasons why teachers are recommended to use metalinguage in the classroom: (1) Learners possess a rich metalinguistic knowledge and teachers should be able to recognize this knowledge, (2) Discussion of language is beneficial for learners, (3) It allows the so called explanatory precision, and (4) It helps learners make the link between what they know and new

knowledge. In fact, it is different from what they know. Teachers do what they know and what they believe about teaching and learning. They decide what to do in the classroom based on their cognition.

Another finding is related to assessment which is not only to take scores. The two teachers know the assessment is to measure students' performance. What they believe is assessment is taking scores. If there is no taking score for the session, the assessment does not take place. Teachers plan to give assessment for students and they have already prepared the form. However, they decide not to do assessment since they do not take scores. They depart from the lesson plan because of the time constraints. Teachers do based on their knowledge about assessment and they believe assessment is to take scores only. It reveals by using SR.

Discussion

SR is conducted immediately right after the tasks take place. If it is more delayed, there is a greater chance that the participants fail to retrieve the information. However, it can be avoided by using the strong stimulus. As Gass and Mackay state that the use of video recorder when collecting the data and the use of video and video transcription as aids to recall yield the useful data. SR in this case can gain the information needed for the research. This study reveals that the use of video, video transcription and lesson planning can be beneficial to recall what teachers decide in interactive teaching. The recall is conducted a week after the tasks are completed. Teachers ask for replaying the episode to assist them retrieving the information.

CONCLUSION

SR is applicable to recall the information of teacher interactive decision making. It reveals, as well, that decisions made by teachers are influenced by their cognition. They do what they know and believe. SR is able to retrieve that information. As Nunan (1992) notes that SR is a technique that the researcher records and transcribes the task teachers do and then teachers can give comment or opinion about the teaching and learning process. He adds that it is difficult to use other means. SR is useful technique to uncover teacher thoughts. The structure of the SR is well prepared and it is consistent with the research questions. Therefore, it is beneficial to recall teachers' thought processes of teacher interactive decision making. It fulfills the research needs.

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