The Use of Wait-Time in Questioning During Reading Comprehension Lessons by Secondary School Teachers in Selangor

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Abstract

Questioning is pivotal in reading comprehension lessons in particular and classrooms in general. One of widely used questioning strategies is wait-time. Thus this study is aimed at investigating the use of wait-time during reading comprehension lessons by two English teachers at a school in Selangor. They were selected using the purposive sampling method. The data were collected through individual-in-depth interviews. The interviews were transcribed verbatim and thereafter analysed using the process of coding and generating themes. Findings revealed that 'duration', 'question type' and 'proficiency level' were the themes generated with regard to the amount of wait time teachers allowed their students to have while 'facts', 'cognition', 'communication', 'teacher's perception' and 'response type' were the themes that emerged for the reasons teachers used wait-time during questioning. This study some implications for teachers. Teachers should learn questioning skills and specifically about the wait-time strategy as both teachers in this study were not aware of the term wait-time. In order to aid this process, the ministry of education should conduct training sessions to expose teachers to classroom questioning and the use of wait time in class. However, in this case study only two respondents were interviewed and both were females. Perhaps future researchers should select a large sample involving numerous schools in the future so the findings can be generalised to other teachers in Malaysia.

Keywords*: Wait-time, questioning, reading comprehension.*

1. Introduction

Classroom questioning is a widely discussed issue. The way teachers question their students is called questioning strategy and this influences the learning process of students. Questioning strategy concentrates on types of questions, their difficulty level, the arrangement of their order and possible answers as anticipated by teachers (Killen, 2010). Questioning has been defined as the art of seeking more explanation by the listener or speaker or writer to make sense of what is being said or communicated based on the questioner's knowledge (Shameem, 2006). Reading comprehension on the other hand means the active process of constructing meaning from written text in relation to the experiences and knowledge of the reader (Heilman, Blair & Rupley 2002). One significant element of questioning strategies is known as wait-time. Wait-time facilitates students' responses and by providing students with sufficient wait-time, more meaningful and thoughtful responses can be expected as believed by Fieldman (as cited in Slocum, 2005) and Price and Nelson (2007).

There are two kinds of wait-time; 'wait-time 1' and 'wait-time 2'. 'Wait-time 1' according to Beyer (1997) refers to the period of silence between posing a question and receiving a response and this period of silence is needed after posing a question to allow students time to think. On the other hand, 'wait-time 2' is defined by Walsh and Sattes (2005) as the amount of time that lapses between a student's answer to a question and a teacher's feedback or comment to the reply. In the present study, the researcher has chosen to focus on 'wait-time 1' only.

In reading comprehension lessons, questioning is pivotal. Without asking students questions pertaining to a text, a teacher can never find out what and how much the students have understood the text. In Malaysian classrooms too, teachers ask students questions in reading comprehension lessons. Nevertheless, many teachers do not wait before a student can respond to a question and instead answer their questions themselves. In other words, teachers either provide students with little wait-time or no wait-time at all.

Most researchers agreed to the use of adequate amount of wait-time during questioning. "Students must first hear the question and decide whether they understand it. Second, they must recall the information from their memories" (Bond, 2008, p.44). According to Rowe, Good and Brophy (as cited in Harris & Williams, 2012), there is a relationship between production of useful classroom discourse and teacher expectations. This fact is also agreed by James and Baldwin (as cited in Nicholl & Tracey, 2007) who mentioned that wait-time gives students the chance to think. "Since serious thinking requires time and effort, students should be given a proper span of time to think about the questions given in the classroom before answering" (Sun, 2012, p.180).

In most classrooms, too short a wait-time is given by teachers to process a question before another student is called to respond whereas in some cases a teacher's age influenced the amount of wait-time given for older teachers were perceived as more patient than the younger ones (Liu, 2009; Tan 2007). When teachers give students a short while to think, questions cannot be processed well. Younger teachers who are impatient have to pose questions and wait at least until the student answers regardless of the accuracy of the response given.

Studies pertaining to the amount of wait time also yielded various results. Jariah and Rosli (2004) and Rowe (as cited in Mutai, 2012) revealed that some teachers wait for just a second on average. Ajaja and Abraka (2012) on the other hand, discovered that a number of questions asked in science classes were given an average wait-time of 3 seconds. Much less was the wait time provided by faculty members in medical classes as they only waited 2.5 seconds after asking their students questions (Cho et al., 2012). It was also found that certain teachers applied only about 0.9 seconds of wait-time after a question was posed (Bond, 2008). Personally the researcher does not agree with this much of wait-time provision for longer wait-time may provide students with adequate time to think of a complete response. Many researchers presented their findings regarding wait-time in questioning and how much wait-time teachers generally give their students to answer questions posed.

However, very little research has been conducted regarding wait-time among teachers in this particular school in Selangor. Therefore, this study seeks to examine the use of wait-time during reading comprehension lessons by two teachers teaching English at a school in Selangor. The following research questions have therefore been formulated for the present study:

(i)   How much wait-time do teachers allow students to answer questions during reading comprehension lessons?
(ii) Why do teachers use wait-time during reading comprehension lessons?

2. Methodology

Participants

This is a case study employing the multiple case single site design. The sample of the study was selected from a population of English teachers in a school in Selangor. Two English language teachers of Form Four were selected from the population using the purposive sampling method. Both were females. The reason purposive sampling was used in the study was the teachers were selected based on certain same traits. The participants should possess at least a Bachelor's Degree with Honours in TESL with at least 5 years' experience in teaching English. In addition, the participants chosen for the study had to be teaching Form Four classes during the study. The reason for selecting only form four students for the study was students of Form Four are usually not involved with public examinations such as PMR or SPM besides being matured thinkers based on their age as compared to students of Forms 1 and 2.

Materials

Individual in-depth interviews were conducted with both participants using an interview protocol which was adapted from Creswell (2008). This interview protocol contained elements such as; (i) time of interview; (ii) date; (iii) place; (iv) interviewer; (v) interviewee; and; (vi) position of interviewee. All questions were constructed in an open-ended format to allow for some flexibility on the part of the interviewees to answer the questions freely. A total of 13 questions were asked.

Procedures

All interviews were recorded and conducted at the participants' convenience over a period of three months. They were thereafter transcribed verbatim and later coded. Data were analysed using the themes that emerged from the transcripts. Prior to conducting the study, participants' informed consent was sought.

3. Findings

In this section results pertaining to the research questions will be discussed. Data for the research questions were collected using individual in-depth interviews although the research questions could also be analysed quantitatively. The two research questions of the study were;

   (i)   How long are teachers willing to wait before their students respond to questions asked during reading comprehension lessons?
   (ii) Why do teachers use wait-time in questioning?

Finding for the first research question 1 has been presented in Table 1.

Themes
Duration
Question type
Proficiency level

Table 1: Themes for the amount of wait-time teachers were willing to allow their students

Table 1 displays the themes that were generated after the collection of the data for the first research question. Five themes emerged from the data namely duration, question type and proficiency level. Under the first theme, duration, Teacher 1 was willing to wait for only few minutes while teacher 2 would only wait 30 seconds after posing a question.

Meanwhile, the second theme, question type, revealed that Teacher 1 perceived that the amount of time she would wait was dependent on the difficulty level of the question. If the question she asked was difficult, she would provide her students with longer wait time but she did not specify the duration. However, if the question asked was simple, she would only provide her students two to three minutes to answer the question.

In addition, the third theme implies that the amount of wait time both teachers gave their students could be related to their students' level of proficiency. This is because Teacher 2 claimed that she was willing her to give her students five minutes if they were of a low-proficiency level but only one to two minutes if they were proficient.

Finding for second research question 2 has been presented in Table 2.

Themes
Facts
Cognition
Communication
Teacher's perception
Response type

Table 2: Themes for reasons teachers use wait-time in questioning

Table 2 depicts the five themes that were generated from the finding obtained for research question 2. The themes are facts, cognition, communication, teacher's perception and response type. The first theme was generated after Teacher 1 stated that she wanted her students to have sufficient time to check their facts and refer to the reading text.

Meanwhile, both teachers were in agreement that giving their students time to think of responses was one of the main reasons for using wait-time in the classroom, hence the theme cognition. Communication was yet another reason both teachers emphasised in their interviews. It seemed that their students had limited vocabularies to express themselves and due to their low-proficiency, the teachers wanted them to try to talk by initiating a discussion with their friends.

On the other hand, the theme teacher's perception reveals that Teacher 2 actually had high expectations of her competent students and therefore gave them more time to provide answers. She also stressed that she perceived opinion-based questions as very substantial. Moreover, it was discovered that Teacher 2 was quite particular about the types of responses she received. She did not like unrelated answered and only desired better responses to the questions she asked, thus employing wait-time in her reading comprehension lessons.

4. Discussion

In brief, this study was conducted with two English language teachers of a school in Selangor to scrutinise their use of wait time in questioning. The result for research question 1 indicated that Teacher 1 was willing to wait for a few minutes whereas Teacher 2 would only wait thirty seconds after posing a question. This finding contradicts with all the studies conducted previously (Ajaja & Abraka, 2012; Bond, 2008; Cho et al., 2012; Jariah & Rosli, 2004; Rowe (as cited in Mutai, 2012)) as they found that 3 seconds, 0.9 seconds, 2,5 seconds, 1 second or less, respectively, was the amount of time teachers were willing to wait before their students could respond. Nonetheless, two new discoveries were made in this study. First, teachers allowed students time to think based on the difficulty level of the questions asked. Second, students' proficiency levels also played a role for the teachers to provide them sufficient time before they could answer the question posed.

In addition, finding for research question 2 revealed that in general the teachers employed wait time in their questioning because they wanted their students to be able to refer to a particular text to confirm details and have sufficient amount of time to think. Besides, communication became a barrier as students had limited proficiency to respond to questions fast. Teacher's expectations and emphasis on students' opinions and the kinds of answers they gave also contributed to the amount of time the teachers gave their students after posing a question. This finding is congruent with the results of the study conducted by Bond (2008) who agreed that students had to recall facts before they could answer a question. Rowe, Good and Brophy (as cited in Harris & Williams, 2012) also found that there was a relationship between useful classroom discourse and teacher expectations. James and Baldwin (as cited in Nicholl & Tracey, 2007) and Sun (2012) also affirmed that wait-time was important to make students think. Nevertheless, this study has provided new insight into other reasons the teachers considered important for providing their students wait time. Those reasons were communication barrier (poor command of language) and response type (to avoid irrelevant responses and elicit good answers).

Based on the results, a few conclusions can be drawn. Both teachers were generally impatient and avoided waiting long especially where low-proficiency level students were concerned. This view is generally acceptable as both teachers were young and patience seems to be associated with age as asserted by Tan (2007) and Liu (2009). They also perceived that waiting for responses from low achievers was a waste of time. This result was anticipated because both teachers at that time were teaching many pre-intermediate classes.

This study has some implications for teachers and the Ministry of Education. Teachers should learn more about questioning strategies and wait-time processes as it was found that neither teacher had heard of wait time before in her life. Thus by employing this useful strategy correctly, learners will become better thinkers and teachers better questioners. The Ministry of Education on the other hand, when sending teachers to do their practical teaching, should engage them in seminars or other forms of trainings on questioning strategies with a focus on wait time. This is because by acquiring more knowledge about wait-time, teachers will be able to elicit more correct responses from their students without perceiving wait-time as a waste of their time, thus developing a generation of critical thinkers.

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Appendix 1

Interview Protocol

Study: Teachers' Questioning In the Teaching of Reading Comprehension

Time of interview:
Date:
Interviewer:
Interviewee:
Position of Interviewee:
Questions:

1) What are the texts you usually use to teach your students reading comprehension?
   a. Why do you use those texts?
   b. Do you use literary texts for reading comprehension? Why?
2) How usually do you formulate the reading comprehension questions, do you adapt them from resource materials or do you construct your own questions? Why?
3) When you question your students, at which level do you normally pitch your questions? Why?
4) What are the types of questions you commonly ask your students to trigger them to think?
   a. Why in your opinion are such types of questions important?
5) When you ask your student a question, do you expect him to give you the answer promptly or do you provide him or her with some time to think the question over?
6) How often do you ask your students lower-order thinking questions? Why?
7) How often do you ask your students higher-order thinking questions? Why?
8) How often do you ask your students open-ended questions? Why?
9) How often do you ask your students closed questions? Why?
10) There are several questioning strategies that teachers usually employ in teaching their students reading comprehension, for instance probing.
    b. Do you employ any?
    c. Why?
    d. Can you give me an example of a questioning strategy that you commonly use with your students?
11) Have you ever taught your students to make inferences? Why or why not?
12) Have you ever taught your students to make judgements about a story? Why or why not?
13) Are the questions you ask your students similar to the ones they are tested upon during the public examinations?
    a) Other than preparing them for the major examinations in future, what are other aims of asking your students such questions?

[Adapted from: Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research by John W. Creswell (2008)]

Appendix 2

The use of wait-time in questioning during reading comprehension lessons by secondary school teachers in Selangor

Themes and Sub-Themes

Raw Themes	Sub-Themes	Themes
• Duration • Question type • Proficiency level		• Duration • Question type • Proficiency level
• Confirm facts • Time to think • Language barrier • Higher expectations • Importance of opinion • Response type		• Facts • Cognition • Communication • Teacher's perception • Response type