

Reviewing the Influences of Teacher Discourse Techniques on Students' Learning

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Abstract. This paper aims to examine the influence of teacher discourse techniques on student learning. Four speaking skills will be mainly reviewed: intonation, repetition, and wait time. The research is informed by the fact that speaking consumes a large portion of student-teacher interactions. Thus, the quality of such interactions, especially in questioning, can be improved using the appropriate intonation, repetition, and wait time. The study was completed using a qualitative research design. The data presented were obtained from secondary materials. The study used multiple approaches to address the research problem. The methods used in the current paper were referred from previous studies that had investigated intonation, repetition, and wait time as speaking skills in classroom interactions. The paper also collected data and findings from various studies to analyze the research problem. The review suggests that long wait time is better positioned to improve student learning. This is especially true for learning concepts at a high cognitive level, which requires critical thinking. Additionally, using the conducive and unconducive questions with falling and rising tones also has a high potential for improving student learning. The grammatical, benign neglect, and interpersonal approaches were found to have their inherent limitations. The review also supports the idea that repetition can advance student learning. The findings indicate that repetitions can be used to draw attention, as well as create learning habits, and many other objectives relevant to student learning. The findings of the study are consistent with the ideas and evidence presented in the literature review. The findings confirm that with the right speaking skills, students learning can be highly improved. Perhaps the major limitation of the research is that it used secondary data..

Keywords: speaking skills, intonation, repetition, wait time.

1. Introduction

The quality of the teacher's strategies plays a significant role in promoting or discouraging effective student learning. Ideally, learning occurs mainly through verbal interactions between the teacher and students in the classroom. For this reason, it is important that teachers develop the most appropriate speaking skills when interacting with students. Asking questions is one of the most common activities involved when the teacher is interacting with students. The traditional instructional teaching method has been criticized for being more a teacher-centered than student-led approach. On the other hand, questioning has been praised by education experts as a way of enhancing student participation, engagement, and critical thinking. In other words, questioning occurs to be more student-oriented. Thus, the manner in which a teacher asks questions has a huge influence on improving student learning. Teachers have different ways through which they interact with students. There are so many aspects of speaking and questioning that can be examined. However, this paper focuses on intonation, repetition, and wait time.

2. Rationales and Research Questions

The study will be useful for evaluating the different speaking techniques on the learning of students. In this regard, the findings will help encourage more effective classroom interactions, which will further help improve the quality of education. There are four main research questions: 1) Do teachers' speaking techniques influence students' learning?; 2) To what extent does teacher repetition in classroom interaction influence students' learning?; 3) To what extent does wait time influence students' learning?; and 4) To what extent does intonation influence students' learning?

3. Research Methodology

The study was conducted through a qualitative research method-Conversation Analysis for several reasons. Qualitative research uses non-figurative data to examine the topic and present findings. It is different from quantitative research that uses figurative data to solve research questions. Qualitative research allows room for an in-depth analysis, detailed information, and a comprehensive assessment of the problem. It is also suitable when investigating abstract concepts. Qualitative research does not require the researcher to be familiar with the complex mathematical and statistical tools. In this regard, qualitative research is easy to conduct [1]. Moreover, the teaching competency is an abstract concept; thus, qualitative research is convenient for this study.

The study will use secondary data to solve the above research questions. Secondary data in this research is retrieved from existing studies, articles, and other relevant sources including, Duff [2], Thompson [3], Terrell [1], and Swift and Gooding [4]. Secondary research data are often easier to obtain than primary research data. Although primary research data could be more original, due to the time limits of my situation, I can only use secondary research data in this paper. Studies on different subjects are readily available online. Specifically, data are mainly obtained from journal articles, which are peer-reviewed and thus, reliable to use. Using secondary has certain benefits. For example, the researcher can access an unlimited range of previous studies. Secondary data also requires relatively little time to obtain and at a low cost [1]. This feature is convenient due to the limited time that was available for conducting the study. The variables of the study will be measured using different procedures, mainly those applied in previous studies.

For the wait time, this paper will cite some of the data from Swift & Gooding [4]. In their study, the researchers divided teacher participants into four different groups. The first group of teachers was given instructions on how to use wait time. The second group was offered special devices that measured the wait time. The third team received both the instructions and devices. The last group did not receive any device or instructions. The class interactions for these different groups were videotaped and recorded for further analysis. The researchers used correlation, variance, and discriminant analysis to evaluate whether waiting time had an effect on student learning.

This study will also draw classroom interaction excerpts and video scripts presented concerning intonation and repetition from two studies. Regarding repetition, the excerpts will be drawn from Duff [2]. Excerpts for intonation will be drawn from Thompson [3]. There are several approaches that have been put forward as models for teaching intonation. The models are based on unique perspectives and concepts. Each of the models has its own limitations in regard to how effective it is for teaching and learning intonation. The study embraces the approach that insists that intonation can be better taught or learned by using the communicative intention as a guideline. In other words, the right intention is which is in line with the communicative intention of the speaker. The excerpts will then be subjected to a conversation analysis, which is an approach that explores social interactions. These interactions can be performed in courtrooms, meetings, and classrooms. Conversation analysis uses an inductive approach to analyze interactions. In this method, the researcher focuses on identifying repeated patterns. From these patterns, the researcher develops rules or patterns that can effectively describe the meanings given to various aspects of the interactions. Conversation analysis, in this case, is meant to explore the relationship between the different types of repetition, intonation, and learning among students [1].

4. Literature Review

4.1. Intonation

Intonation is an inherent part of speech, but it is commonly neglected in teaching. The reason for neglecting intonation is mainly attributed to the numerous uncertainties and difficulties involved in teaching and learning [3].

The models that have been put forward to teach intonation include the grammatical, interpersonal, and benign neglect approaches. The benign neglect method is anchored on the uncertainties of intonation discussed above. It maintains that intonation is difficult and complex to teach. Thus, there are no particular rules to learn intonation. The students cannot be taught, but they need to acquire intonation skills on their own. This is mainly because of the implicit nature of the concept. In this regard, learning of intonation can be improved by exposing students to particular contexts that influence them to be aware of different skills. Moreover, the approach insists that intonation can be better learned through imitation. The students also need to be given more practice opportunities. As evident, the method recognizes that intonation has numerous finer details that cannot be easily taught. However, it still recognizes that there are several general features that can be taught. Thus, teachers should focus on these generalized features [3].

The grammatical approach establishes a pattern to integrate the form of intonation, depending on the question's grammar. In this regard, there are two types of questions from a grammatical perspective. These are the 'wh' (e.g. what/which/where) and 'yes/no' questions. The grammatical approach assigns a rising or falling intonation depending on the category that a question falls in between the two described above. In this regard, questions that require a "yes/no" answer are assumed to have a rising intonation. On the other hand, questions that begin with 'wh' are believed to have a falling intonation. However, this approach is not without its limitations. For instance, there are 'wh' questions that have a rising intonation. An example is when the speaker asks a question out of surprise. The questions that require a "yes/no" answer may also have a falling intonation. The approach is, thus, inadequate in teaching intonation [3]. More types of questionings are required, including repeating students' answers with a raising intonation.

The interpersonal method focuses on conversation management and precisely attitudes. In this regard, it insists that teachers should be respectful to students when asking questions. In this regard, students are expected to change intonations when they expect their teachers to be kind. In particular, rising intonation is assumed to convey a respectful attitude. This is especially true when using the 'wh' questions. However, as evident, this approach has two main limitations. First, it is limited to the respect in communication. Additionally, it is only focused on the 'wh' questions [3].

4.2. Repetition

Repetition has been widely discussed in literature and education practice as a reliable way of improving students' learning. The practice has been supported from the perspective of cognitive psychology and many other theories. Repetition can be used to cultivate students' learning habits, such as previewing, counterchecking, and understanding. This is especially true in the case of repeated target structures. Overall speaking, repetition can help increase the students' access to various language forms. For example, if teachers repeat a sentence structure in past tense for many times, students are more likely to remember this structure as compared to situations when teachers only introduce past tense for one time.

Additionally, repetition can be used to build automaticity among learners. When a given concept, tone, or grammar is repeated, the learners become automatically aware of it. For instance, consider when the teacher or other colleagues are pausing at every comma when reading. The learners will automatically attach the comma mark to mean that a pause is required. Frequent repetition influence learners to interline various target structures. Thus, the practice of these target structures become automatic rather than controlled. Again, repetition has the effect of naturally drawing the audience's attentions whatever aspect is repeated. Attention is necessary to direct the learner to the details of the aspects they are required to learn. Drawing attention is one of the most obvious and automatic effects of repetition. Furthermore, repetition is useful for noticing gaps between oneself and others. Noticing these gaps provides a way through which students can take the required corrective action [2].

4.3. Wait Time

In this regard, it would be effective to first describe or define wait time in the context of communication in teaching. Waiting time can be defined as the duration of pause a speaker allows before speaking again or receiving a response from another party [4]. Wait time can also exist in two forms; first and second wait times. The first wait time has a similar description to its generalized meaning in the context of this study. The period elapses when a speaker completes his or her question and receives a response from a particular audience or another speaker. The second wait time is when the teacher allows the entire class to respond to a question [4].

The wait time varies depending on the different cultures. Culture is a set of values, beliefs, and norms shared among members of a particular social group. Thus, culture affects the behaviors, attitudes, interests, and many other aspects of individuals. The effect of culture on people is critical, given that members of society tend to internalize their cultures. Internalization occurs when people's behaviors are intrinsically influenced by their dominant beliefs, values, and norms. For instance, the Western culture promotes the idea that teachers and parents should embrace a dialogue approach when correcting or training children. In other parts of the world like Africa, the command approach in teaching and parenting is perceived to be common. The wait time may vary depending on the aggressiveness or gentleness of culture, which, in turn, determines the patience or wait time teachers allow to learners. For instance, a study conducted on Nigerian teachers revealed that their average wait time was 2.4 seconds. Another study found that Turkish teachers allow waiting time duration of 3 seconds on average. The waiting period, thus, varies from 1 to 3 seconds [4]. This is regardless of the cognitive level of the question asked.

A long wait time has been found to improve student learning. Generally, the more time a person is allowed to execute a particular task, the more likely that the assignment will be completed at a relatively high satisfactory level. A long wait time means that the teacher will talk less. On the other hand, the input of the student will be significant. Consequentially, the teaching becomes student-centered. This kind of teaching has been widely recommended to increase students' learning outcomes. Moreover, when teachers talk less, it also reduces the burden in regards to time spent speaking. The reduced time of talking minimizes burnout and fatigue among teachers. With less stress, teachers experience relatively high job satisfaction. This makes teacher commit more to executing their responsibilities. Again, the increased time allows more room for peer evaluation. Peer evaluation is important because it promotes collective learning in which students understand each other's mistakes and achievements. Additionally, the frequency of disciplinary remarks from the teacher or students will also reduce. Too many disciplinary remarks force students to feel incompetent, roughly treated, or discriminated against. They consequentially develop a negative attitude, which is inconvenient for learning. A long wait time allows less room for disciplinary remarks and direct focus towards providing a response that will improve learning [4].

Long wait time is particularly effective for questions at a high cognitive level. Such a question often requires more time to process and analyze information before giving a precise response. High cognitive level questions stimulate critical thinking among students. Critical thinking is one of the most valuable skills in learning. Low cognitive level questions often require mere yes/no replies, basic description, summary, and other less complicated tasks. Long wait time is helpful when the teacher is moving from simple to complex learning concepts. The ascending order is at the core of learning theory. More wait time is also needed for questions that require additional information. Such questions help to challenge students' memory and push them towards preparing a more comprehensive response. However, the long wait time is ineffective for closed questions. Closed questions, in this context, are those that require a yes/no or brief response. Increasing the time will lead to wastage of hours in learning or boredom among students [4]. One can refer to [5-10] and references therein for more details.

5. Findings and Discussions

Due to the time and condition constraints, the data for wait time were collected from Swift & Gooding [4] and Duff [2]. We explored and summarized findings for wait time based on the collected data set. The results revealed that students of the first teacher group with instructions to a longer wait time tended to ask high-level questions. The questions and responses were more analytical; the questions focused on issues that concerned confusion or ambiguity in the concept the students were learning, and the questions attracted different reactions with no single answer. Moreover, the students made more contributions to classroom interactions than other groups. It is interesting to find that students talked more than teachers in the group. Furthermore, vocabulary, phrasing, grammar, and clarity with which they used to ask questions and respond, were also more relevant and appropriate to the context. The findings are consistent with the main points mentioned in the literature review, insisting that there is a positive correlation between waiting time and improvement in student learning.

Excerpts 6 and 7 (for all excerpts, please refer to Appendix A) were drawn from Duff [2], indicating a teacher’s transition to student-led learning. In excerpt 7, Kati, the teacher, is not involved as the students continue to mention the different elements associated with Siberia’s struggles. This is consistent with the literature finding, which proposes that repetition promotes student-centered learning. In excerpt 8, the student repeats his colleague’s phrase, “everything like,” and this helps influence the initial speaker to give a comprehensive list and accurate classification of what he/she meant by saying that “peasant faced famine, starvation, and everything like that.” In excerpt 9, the continuous repetition of the term enlightened is used to remind a student that the phrase was not a logical, serious, and appropriate answer to the question in that context. In excerpt 10, the teacher pushes a student to repeat a particular phrase to another colleague who did not pay attention. The repetition helps students draw their attentions to the language structures that were initially arranged incorrectly. For example, repeating a pronoun to a student who makes an error of its omission will to some extent help draw the learner’s attention to the need of including important pronouns. Duff [2] provides several other examples to indicate how repetition can encourage students’ learnings. Table 1 shows that 6 out of 7 ‘wh’ questions have a falling intonation. On the other hand, 5 out of 9 yes/no questions have a rising intonation. The number of yes/no questions with a falling intonation is relatively high (4).

Table 1. The Chat Show

Tone choice	N. of occurrences	Example
Wh- +fall	6	what do you do then as a couple now
Wh- +rise	1	how much more therapy have you got to go through new
Yes/no +fall	4	were you prepared for it to come back
Yes/no + rise	5	has it brought you closer to God

Note. Reprinted from Thompson [3]

Table 2 indicates that all had a falling intonation out of 12 ‘wh’ questions. On the other hand, 6 out of 8 yes/no questions also had a falling intonation [3]. This indicates that the grammatical approach for intonation is not perfect or universal. The approach is more consistent with ‘wh’ questions that require a yes/no answer. Thus, it confirms that the grammatical approach is limited.

Table 2. Casual Conversation

Tone choice	N. of Occurrences	Example
Wh- + fall	12	what in fact did you do
Wh- + rise	0	
Yes/no - fall	9	are you going to America
Yes/no + rise	6	d’you teach

Note. Reprinted from Thompson [3].

6. Conclusion

The speaking techniques of teacher significantly contribute to the learning of students. A long wait time, repetition, as well as application of the conducive and non-conductive questioning model for intonation are effective for improving student learning. When examining the effectiveness of intonation, repetition, and wait time, it is necessary to pay attention to contexts. There might have been several principles to guide teachers on how to use repetition, wait time, and intonation. The models proposed for teaching intonation can, to some extent, show these principles. Most of teacher participants apply the rule of the thumb. However, there is no single and universal rule that explains the correct approach to repetition, intonation, or wait time. The rules that have been presented forward have exceptions. These exceptions occur in regard to the unique circumstances or context of the student-teacher intonation. Thus, teachers and students should also be aware of how context can affect the use of intonation, repetition, and wait time. The rule of thumb presents a guideline, but also with exceptions. For instance, there are some situations where questions beginning with 'wh' have a rising tone. Also, there are circumstances in which the same questions have a falling tone. Additionally, for wait time, a long period is good for complex questions. However, it will be ineffective for simple questions and students of higher learning institutions. Therefore, it is important to investigate the influences of speaking techniques in teacher discourse to students' learning.

Appendix A

In the following excerpts, T means teacher; S means student; SS refers to two students; SSS or Ss refers to many students. Other initial(s) or unique identifiers used for students identifiable by name (e.g. M, J, or S1, S2) rather than S.

1. Excerpt 6: EFL History Class

Student 5: What was in Siberia?

Kati: Cold =

Student 8: = Cold ((laughs))

Kali: Cold and - and prisoners ((laughing)) Cold and [uh prisoners

Student 5: [Snow

2. Excerpt 7: EFL History Class

Student 2: [The secret police in Russia] censored all the book and newspapers and uh arrested political groups and people who criticized the government, and this people, were usually sent to Siberia ha la

Student 1: Where it was cold.

Student 2: Yeah and there was [snow

Student 3: [There was no government =

Student 2: = And prisoners ((laughing))

3. Excerpt 8: EFL History Class

Student 1: this had to be concluded in 49 years. So you had 49 years to pay t-that 100 forints. Uh but uh these given lands were usually not big enough, and (4.8) therefore the- the peasants were - in a quite bad situation. So uh famine and starving and everything like that

Student 9: ((laughing)) Everything like

4. Excerpt 9: EFL History Class

Kali: That's a good - question. What were these meetings for - and why did -people bother - going to clubs or meetings of the sections. Why didn't they stay at home- [and why didn't they lead a happy family life and so on

Student: [Cos they were interested in politics

Pete: Cos they were enlightened?

Kati: Because they were enlightened?

SSS: ((laughter))Uh they were interested in politics

Zoli: (xx) had been enlightened. (1.7)

W: (x) all burning

SSS: ((laughter))

Kali: That's an interesting idea and what made them so enlightened

Val: Well maybe a match

Z: Invention of electricity

Kati: [Yes - I mean do you think they -I mean the (x) shopkeepers were - sitting behind the counter reading Rous- Rousseau and Voltaire

SSS: ((laughter))

5. Excerpt 10: German FL Class

Teacher: Was macht ihr alles am Morgen? Janet, was machst du Morgens? What all do you do in the mornings? Janet, what do you do in the morning?

Janet: ((describes when she gets up and showers, over several turns))

Teacher: Was machst du dann, Janet? What do you do next, Janet?

Janet: Um. ich ziehe - mich an, I get dressed.

Teacher: Mhm. Gord. Was machst sie dann? Mhm. Gord. What does she do then?

Gord: Um, ich weiss nicht. Um I don't hum."

The above excerpts 6 to 10 are cited from Duff (2000).

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