Classroom Observation: Teacher Talking Time and Student Talking Time

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1. Introduction

In this study, I shall report the research that we did on real-time classroom observation. Our observation scheme focuses on Teacher Talking Time (afterwards TTT) and Student Talking Time (STT). The method is simply to count TTT and STT by watch. We observed two peer teaching lessons, which were Listening class and Speaking class. To make the results reliable, after we observed the lessons on real time, we watched the recorded videos. We also added two more categories, which are Silence Time and Tape Time (this is only for Listening class). Our main aims of this observation are to objectively and systematically see how long the teachers or the students would talk and what kind of interaction types would happen during the lesson.

Firstly, in section 2, I shall review some studies which are related to classroom interactions among the teacher and students. And we shall raise two expectations; 1. The teacher will talk more than the students in Listening class, while the students will talk more than the teacher in Speaking class, and 2. TTT and STT will vary by different kinds of tasks or stages. In section 3, I shall explain the research setting such as students' age, their English proficiency level, their characteristics, the context and the lesson procedures. Then, the design of our observation scheme will be presented. In section 4, I shall present the research results by comparing and contrasting Listening and Speaking lessons. In section 5, I shall answer the two expectations raised in section 2 and discuss other findings and implications of the findings for

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classroom practice will be made. Some interesting comments obtained from interviews to the teachers and students are included. Also, I shall discuss strengths and limitations of our design and analysis, and conclude in suggesting improvements of the scheme.

2. Literature Review

There is fewer previous research which use the quantitative observation method than qualitative method in order to see classroom observation. Many studies focus on types of teacher talk, for example, types of question, which are referential or display questions, or yes/no, either/or, or wh-questions. Of great interest to classroom researchers is the question of how teacher talk is distributed, that is, how it differs in function. Whereas researchers tend narrowly to investigate teachers' linguistic and pedagogical production, learners have been viewed in a slightly broader perspective (Chaudron, 1988). Learner behavior in language classrooms is mainly focused on learners' production types or interaction types between them.

Instruments for observing classroom processes are designed to describe or classify behaviors of the teacher and the students. The rage of categories is diverse (E.g. Allwright's 1980 turn taking and turn-giving categories, and Moskowitz's 1970 jokes, praises or encourages) and various coding systems are developed, for example, Wajnryb's 1992 coding system: name (N), nod (\(\wedge\)), smile (\(\cup\)), eye contact (\(\odot\)), reprimanding look (\(\cap\)) and touch (T).

As to amount of teacher talk, Chaudron (1988) reviews that 'research in first language classrooms has established that teachers tend to do most of the talking about 60 % of the moves'. J. D. Ramirez et al.'s (1986) study found teacher and student utterances are attributable to program type, grade levels and the teacher. Here, we shall raise the first expectation: The teacher will talk more than the students in Listening class, while the students will talk more than the teacher in Speaking class. And the second expectation is TTT and STT will vary by different kinds of tasks or stages.
3. Design

3.1. Research setting

The research setting was peer teaching in both lessons that we observed. There were 7 students in Listening class and 8 in Speaking class. The students' English proficiency level was intermediate or upper intermediate in both classes. The students' age was 17–18 in Listening class and 18–19 in Speaking class. The expected English level and age were almost the same as the students' who attended in both classes. The context was Taiwan in Listening class and Japan in Speaking class, and both were Asian countries. There were 2 teachers for each lesson, and 4 teachers in total. All of them have never taught before and they are all NNS. From these conditions above, we consider the environmental factors such as the class size, the level of students, the context and teaching experience, as almost the same in both lessons.

As to the lesson procedures, both lessons were divided into 4 stages. Listening class consisted of warm-up, pre-listening, while-listening and post-listening stages. Aims of the lesson were to improve listening skills to understand interviews and to give students opportunities to express their opinions about good marriage. The topic for listening was divorce. At the warm-up stage, the teacher introduced the topic, and at the pre-listening stage, she gave background information before listening. At the while-listening stage, the students listened to the tape and comprehension check was done in pair work and with the teacher later. At the post-listening stage, the students discussed good marriage and two of them did presentation about that.

Speaking class consisted of warm-up, presentation, practice, and feedback stages. An aim of the lesson was to learn how to agree/disagree. The topic was marriage and an ideal husband. At the warm-up stage, the teacher introduced the topic and let the students do a controlled activity, which was to fill in the blanks of a dialogue talking about marriage. At the presentation stage, the teacher introduced expressions to agree/disagree. At the practice stage, the students thought and talk about an ideal husband at first individually, then in pair and finally in discussion. At the feedback stage, the
expressions to agree/disagree were reviewed.

3.2. Observation scheme

Our observation scheme focuses on Teacher Talking Time and Students Talking Time. Main aims of this observation are to objectively and systematically count how long the teachers and the students would talk, and to see what kind of interactions and how long each interaction type would happen in the classroom.

First of all, categories for the observation scheme should be decided. In Brown's Interaction Analysis System (1975), the following categories are used to describe the classroom interaction:

- **TL**: Teacher lectures, describes, explains, narrates, and directs.
- **TQ**: Teacher questions, about content or procedure.
- **TR**: Teacher responds, gives feedback to pupils' contributions.
- **PR**: Pupils respond directly and predictably to teacher questions and directions.
- **PV**: Pupils volunteer information, comments or questions.
- **S**: Silence. Pauses, short periods of silence.
- **X**: Unclassifiable. E.g. confusion in which communications cannot be understood; unusual activities such as reprimanding or criticising pupils; demonstrating without accompanying teacher or pupil talk; short periods of blackboard work without accompanying teacher or pupil talk, etc.

This system is simple; however, this does not cover interaction types among students, for example, pair work, group work or individual work. In our observation scheme (see Table 1), three teacher talking types, which are TL, TQ, TR used in Brown's Interaction Analysis System, are combined into one, which is Teacher Talk. Also, PR and PV are combined into one, which is Individual Talk. We want to focus more on Student Talk, therefore, three more categories are added, which are Chorus, Pair work, and Group work. Chorus refers to students' simultaneous talk, for example, repeating the teacher in chorus, or reply to the teacher's confirmation. Silence is counted when it
 lasts more than 3 seconds. Tape Time is counted only in Listening class. In Brown’s scheme, the observer places a tally in a grid to describe interaction types every three seconds; however, the time is counted in our scheme. This is because we do not have enough time for training to count, and we think it is difficult to count 3 seconds reliably. For example, total time for each category is put in a grid below (see Table 1).

Table 1 A grid for description of each time

<table>
<thead>
<tr>
<th>Stage 1: Warm-up</th>
<th>Stage 2:</th>
<th>Stage 3:</th>
<th>Stage 4:</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Talking Time</td>
<td>197</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Talking Time</td>
<td>Individual Talk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chorus</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Pair Work</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Group Work</td>
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<td></td>
<td></td>
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<tr>
<td>Tape Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In order to make the research results more reliable, two observers are involved in counting the time, and also, we watched each video twice to check the time properly. We conducted interviews with the teachers and the students after the lesson in order to get detail information that cannot be interpreted from the talking time.

4. Results

The results of Speaking class and Listening class are explained by in a comparison.

As can be seen in Figure 1 and 2, on the whole, time management is successful in both lessons. The total Listening lesson time (41'13: 2473s) is about 6 minutes over and Speaking lesson time (37'19: 2239s) is about 2

(1) “Second” is used as a measurement unit in the figures, however, “Minute” is also used in the main discussions in order to help understanding. For example, (3’17: 197s), it means that 197 second are equal to 3’17.
minutes longer than the lesson plan (35'00: 2100s). A similar result can be found in each main stage. At the while-listening stage, it takes about 6 more minutes than the teachers expect. Time allotment of Practice stage (20'44: 1244s) is quite different from the lesson plan (12'00: 720s), which is about 9 minutes over. It can be said that it tends to take more time than the teacher expects at the main stage.

![Fig. 1 Time Management of Listening Class](image1)

![Fig. 2 Time Management of Speaking Class](image2)

In Listening class (see Figure 3), although TTT (18'15: 1095s) is slightly longer than STT (16'09: 969s), there is no big difference between them. While TTT is gradually decreasing, STT is increasing toward the end of the lesson. At warm-up and pre-listening stages, the teacher is dominant, while the amount of STT has increased at while-listening and post-listening stages. In Speaking class (see Figure 4), TTT (18'27: 1107s) and STT (17'42: 1062s) are almost the same. Interestingly, this result is quite similar to the one of Listening class.

Tape is used only in listening class. The tape length is exactly 3 minutes and it is listened twice, therefore, the total Tape Time is 6 minutes. The first listening is after the questions are given to the students and the second listening is after the students compare their answers in pair. Tape is used without stopping in the only while-listening stage.

Silence Time is the least among the other categories: TTT, STT, and Tape in both lessons. Even though the amount is slight, there are some reasons for the silence. The longest silence (0'25: 25s) is what the teacher intentionally
created at the pre-listening stage. That is to give time to the students so that they can understand the questions before listening to the tape. While Silence Time is short at the while-listening stage (0'18: 18s), it is counted four times after the teacher asked some questions. There is no silence intentionally created by the teacher in Speaking class. The longest silence is counted when the teacher is preparing for cards to give students, and before the teachers show their model at the practice stage.

Figure 5 and 6 show the time of 4 types of Student Talk Time, which are Individual Talk, Chorus, Pair work and Group Work. Individual Talk is increasing toward the later stages in Listening class (see Figure 5). At the post-listening stage, two students did presentation; therefore, talking time is the longest among other stages (3'09: 189s). In Speaking class (see Figure 6), the students talked individually mostly at Practice stage (4'45: 285s). This is
Examples of Chorus are short answers such as 'Yes' or 'No'. In Listening class, Pair Work is counted at only the while-listening stage (5'09: 309s). In contrast, in Speaking class, pair work is used at three different stages: Warm-up (4'14: 254s), Practice (6'39: 399s) and Feedback (1'48: 108s) stages. While Group Work is used at only the post-listening stage (5'41: 341s), in Speaking class, it is not used at all.

Figure 7 and 8 show Each Student Talking Time. Every student spoke at least once in both lessons. The student who talked the longest in Listening class is Mai (1'55: 115s) and the second longest is Ho-Jung (1'36: 96s) (see Figure 7). Both did presentation at the post-listening stage. There is no significant difference among the other students' talking time except the two. The student who talked the longest in Speaking class is Tae (see Figure 8). She talked much more than the other students did (2'01: 121s). On the other hand, the students who talked for less than 15 seconds are Nanako (0'08: 8s),
5. Discussion

5.1. Discussion of the results in a comparison with Speaking class and Listening class

5.1.1. TTT and STT

The first expectation raised in section 2 is The teacher will talk more than the students will in Listening class, while the students will talk more than the teacher will in Speaking class. Our expectation proves wrong. The results show no significant difference between the two lessons. These results are similar to ones of Chaudron’s (1986) statement, which is that most of teachers tend to talk around 60%. The total TTT of Listening class is about 53% and 52% in Speaking class. Both are under 60%. From these numbers, we can guess similar approach is taken in both lessons, where the teachers tried to
elicit students' utterances or make the lesson more student-centred. We found TTT and STT are much more strongly influenced by different stages than different lesson types. This proves our second expectation is partly right: 'TTT and STT will vary by different kinds of stages'. Ramirez et al. (1986) state the influence of program type, grade levels and the teacher on TTT. In our observation, there is no big difference in terms of students grade levels and the teachers. Moreover, there was no significant difference between listening and speaking.

5.1.2. Time Management

Both Listening class and Speaking class are successful for time management on the whole. However, both lessons failed in time management at the main stage. It can be said that it tends to take more time than the teacher expects at the main stage, which is While-listening stage in Listening class (about 6 minutes over) and Practice stage in Speaking class (about 9 minutes over).

Ideally they should keep the planned time, but it is not the usual case. It happens that they cannot expect how long an activity takes time beforehand. We can suggest the teachers that; the main part might take more time than they expect when they are planning lesson. They can put the main stage not at the end, in case they might fail time management. If they can change their plan in the middle of the lesson, there is no problem. However, they will need more train and experience as a teacher to be flexible enough to do with unexpected matters. If they can change what the teacher might not able to cover during the lesson into homework, that would be another solution.

5.1.3. Tape Listening Time

The tape was used twice in only while-listening stage in the same way, which went through the tape from the beginning to the end without stopping. Some opinions about tape use could be obtained in the interview to the students. They answered that they could understand the main points, but they were not satisfied with the detail parts. Most of them wanted to listen to the tape more than twice to comprehend the whole tape. Various ways for tape use are possible: for example, listening to the tape to guess the topic as warming up,
listening to the tape so that the students can check their answers again themselves at the post stage. Also the teacher can drop down the tape into several parts to keep the students at the same pace with others by checking their comprehension at each stage.

5.1.4. Silence Time

Even though Silence Time is the least among the other categories: TTT, STT, and Tape in both lessons, there should be some meaningful reasons for the silence. Silence can be roughly divided into two kinds. One is what the teacher intentionally created, and the other is what happens naturally or unexpectedly. For the former silence, students can think with more concentration than while they are listening or speaking. This kind of silence is made at the pre-listening stage (0'25). This silence is useful for the students so that they can understand the questions before listening to the tape.

For the latter silence, while time length is short (0'18), it is counted four times after the teacher asked some questions at the while-listening stage. This silence is an indication that the students could not understand the meaning of the questions or they do not know the answers. After the silence, the teacher need to change the questions into easier ones or explain the meaning more. In Speaking class, the longest silence is counted when the teacher is preparing for cards to give students, and before the teachers show their model at the practice stage. This kind of silence cannot be avoided, but if it is too long, teachers can improve their skills explaining the activity at the same time.

5.1.5. Types of Student Talk

There can be range of interactive patterns, individual work, pair work and group work in the classroom. The use of them depends on learning needs, purposes and contexts. Wajuryb (1992) points out that different interaction type work requires different teacher skill. Chorus Time is fewest in both lessons, this shows they are not the drill type lessons. Rather, Pair Work is the most preferable interaction type here. In Speaking class, the amount of Pair Work (12'41) is considerably bigger than the other categories. It appeared at three stages, Warm-up, Practice and Feedback. The role of the pair work at
each stage seems different. The tasks at Warm-up stage were very controlled, where the students fill some blanks of dialogue. At Practice stage, pair work was used before discussion and language use was freer. The students could exchange their opinions. At Feedback stage, language use became controlled again because the same dialogue was used at Warm-up stage as consolidation. In Speaking class, Pair work was used in various ways.

On the other hand, pair work was used twice only in Practice stage for comprehension in Listening class. The procedure was as follows: The students listened to the tape, and check the answers in pair. The same procedure happened twice. The different use of pair work in both lessons would be because aims of each task are different. In Listening class, the same activity can be used so that the students can comprehend more.

5.1.6. Each Student Talking Time

Every student speaks at least once in both lessons. This is possible because the class size of both lessons is not too big (7 to 8 students). We can see the teachers tried to elicit every student’s responses. However, each student talking time is not the same against the teachers’ efforts. The student who obviously talked the most is Tae in Speaking class. One reason for this is explained by the unbalanced number of the members in each group during discussion. She was in the smaller group, where there were only two members; therefore she had to speak to fight with the other group, where there were 6 members. On the other hand, the three students who talked only less than 15 seconds are all in the bigger group during discussion. They might not have needed to speak too much or they might have missed the chance to speak out. The student who talked the most is Mai in Listening class. She did initiations three times. This might encourage her to talk more and get involved in the classroom activities.

These results of Each Student Talking Time might be useful for the teacher in order to think which student she should select later. If the talking time of each student is too unbalanced, the teacher can carefully select the students who do not speak a lot so that the teacher can elicit responses from them.
5.2. *Strengths and limitations of our observation design and analysis*

One specific feature of our scheme is that we can get quantitative data about TTT and STT. We can see how long the teacher talks and the students do at each stage. If we find significant numbers, then we can go on to the details. We do not need to spend much time to find some particular aspects like transcription of the whole lesson. In order to get more detailed information, we conducted interviews to the teachers and the students after the lesson, for example, why this happened, what the numbers mean, are there any gaps between teachers expectations and students' responses, etc. Combination of quantitative and qualitative method is necessary for our scheme to interpret the results. This can be the limitation of our scheme, because we cannot say anything from only the numbers. We can get overall impressions, for example, the time of each lesson, TTT and STT, but we cannot see how they happened. This is because the time sequences are not described in our scheme. In order to solve this problem, our scheme is revised. If we use the grid below, the time sequence can be described and we can see interaction types. For example,

<table>
<thead>
<tr>
<th>Table 2</th>
<th>A revised grid for description of interaction types</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stage 1: Warm-up</td>
</tr>
<tr>
<td>Teacher Talking Time</td>
<td>65</td>
</tr>
<tr>
<td>Student Talking Time</td>
<td>Students Respond</td>
</tr>
<tr>
<td></td>
<td>Students Volunteer</td>
</tr>
<tr>
<td></td>
<td>Chorus</td>
</tr>
<tr>
<td></td>
<td>Pair Work</td>
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<td>Group Work</td>
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<tr>
<td>Tape Time</td>
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<tr>
<td>Silence</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

Compared with our scheme (Table 2), one improved aspect is the category of Individual Talk is divided into two, which are Students Respond and Students Volunteer in the revised version. We can see the student initiation. Another improvement is time sequence is described. In our scheme, only total time amount for each stage or for each talking time was shown, however, in the revised version, we can see the sequence of interaction types.
Since both lessons are peer teaching, the planned settings are not real. However, we got advantages from peer teaching. One is the teachers planned the lesson beforehand and made a lesson plan, therefore we could guess what would happen next. After the observation, we could compare the results that we got and what the teacher expected by looking at their lesson plan. In the real situation, teachers do not make the lesson plan every time.

6. Conclusion

With our scheme, we can see the exact time spent on what kind of activities or at which stages. If teachers fail time management or if they want to use activities in a more various way, the results that we obtained will be useful. Moreover, we found TTT and STT are more influenced by different stages of the lesson than by the teacher or the program type. Even though we need to improve our scheme, we believe we could obtain a substantial amount of information from the classroom observation.

References