Developing Listening Skill and Self-efficacy among Secondary Schoolers Adopting Flipped Classroom Activities

By

Mahmoud Mohammed Hassan Makkawy*

Abstract: The current study aimed at developing both listening skill and self-efficacy among secondary schoolers adopting flipped classroom activities. The research design is the quasi experimental pre-posttest. Two classes from El Sadat secondary School for boys in Ismailia were chosen purposefully. Each group consisted of forty male students. The experimental group was taught adopting flipped classroom activities for developing listening skill and self-efficacy whereas the control group was taught using the regular method. Instruments used were a listening test administrated to both groups before and after the treatment and self-efficacy scale applied to both groups after the treatment. The obtained data was statistically analysed through the use of Cronbach's Alpha, t-test and effect size. The results of the study revealed that the students taught by flipped classroom activities had better scores in the listening test and self-efficacy scale than those taught by the regular method. It can be concluded that flipped classroom activities had a significantly positive effect on students' listening skill and self-efficacy.

Key Words: Flipped classroom, listening skill, self-efficacy.

Introduction

Listening skill plays an important role in communication and learning languages as it enables learners to respond to others. This led Lin (2002), as cited in Ahmad (2016:166), to assert that learners with good listening comprehension abilities are more able to participate effectively in class. Listening is also considered a receptive skill that develops naturally through exposure to the oral aspects of language. It also involves receiving a text rather than delivering it.

On the other hand, Gebhard (2000), as cited in Qodir (2016:2), mentioned that listening is an active skill as people respond actively to what they hear, see or agree with. He adds that Language learners take part in oral communication properly and delivers meaningful contexts as long as they understand well.

* Supervisors:
Prof / Mohammed Ismail Abu- Rahmah.
Prof/ Hussein El- Ghamry Mohammed.
Dr / Heba El- Shahat Mohammed.
Besides, Bueno et al (2006:282) as cited in Sayadi & Heidar (2018:73) argue that listening is a psychological process which is based on a cognitive level inside people’s heads, and it is also a social process which develops through interaction between people and the environment.

Despite its importance, listening skill is complex and challenging for students at secondary schools in Egypt who have weakness in their EFL listening skill. This weakness may be a reflection of;
1. Using traditional approaches focused on the grammatical skill.
2. Students learn English only for the sake of the exam to get high marks not to communicate well.
3. The main concern in the Egyptian schools is only for reading and writing neglecting listening as it is not a part of the achievement tests.
4. Most classes are not provided with electronic equipment required for listening.

Siegel (2014) mentioned that language students may also be frustrated that there are no rules to memorize that will automatically lead to listening success. He added that L2 learners face a big challenge in learning to listen in their new language.

As a result, many studies were conducted to overcome listening problems. For example, Desouky (2012) studied the effect of a suggested strategy (graphic organizers and discussion method) on developing the listening and speaking skills of the TEFL in industrial secondary school students. Furthermore, Qoura etal. (2017) explored the effect of a WebQuest-Based Program (WQBP) on developing the EFL listening and speaking skills General Secondary School. In addition, Mohammed (2018) investigated the effectiveness of using audiobooks on developing listening comprehension among Saudi English as a Foreign Language (EFL) preparatory year students.

To support this claim, the researcher conducted a pilot study in which a listening test was administrated to explore the real situation of English listening skill among a group of 30 students at El Sadat secondary school for boys in Ismailia. The aim of this test was to measure how good secondary schoolers are in EFL listening skill. Students were asked to listen to a text and answer some questions. Results indicated that 46.7 % of students got less than 50% of the total score and 13.3% of students got only 50% of the total score in the listening test.

As mastery of EFL listening skill creates self-efficacy, the current study tried to develop EFL listening skill and self-efficacy. The concept of self-efficacy has been used in educational research in the last few years. Bandura (1997) defined self-efficacy as the person's ability to
accomplish certain tasks. He added that it is self-perception of being capable of performing these tasks under certain conditions. Evers et al., (2002) also defined self-efficacy as the beliefs in one’s capabilities to organize and accomplish the courses of action required for producing given attainments. He also added that the behaviors, motivation and the product of humans whether success or failure are the result of their self-efficacy. Some researchers asserted that students with positive self-efficacy believe in their abilities and face challenges better than those who have negative self-efficacy. Others indicated that there is a strong relationship between self-efficacy and academic achievement and performance.

The abovementioned discussion necessitates suggesting a teaching program that helps students to improve their listening skill and self-efficacy. Therefore, the researcher adopted using flipped classroom activities for developing these skills.

A Flipped classroom model may be an adequate strategy to teach learners inside and outside classroom particularly when a teacher doesn't have enough time to communicate with them. The teacher can deliver material or task via a video and asks students to watch it before coming to the class. It also provides an active environment which increases communication between students and their teacher and involves students in learning through application and practice. In this respect, flipped classroom uses a student-centered approach as it focuses on student's learning and keeps students responsible for their learning more than their teachers.

In this regard, Khilchenko et al (2019:1) mention that flipped classroom saves class time for teachers and offers learning alternatives to students rather than just teaching them in a sit-and-listen structure. He also adds that teachers can deliver their instruction by recording the work they do, creating videos of themselves teaching, or downloading video lessons from reliable internet sources and then share them to students so as to watch these videos before coming to the classroom so that they can be active in the classroom activities. Furthermore, Enfield (2013: 27) states that flipped classroom may remove the uselessness of face-to-face lessons and provide lectures with the use of modern technology.

Generally speaking, flipped classroom is a student-centered learning model that uses technology by delivering a synchronous direct instruction outside the classroom. Teachers can enable students to do cooperative activity, peer instruction or feedback, project based-
learning or creative learning. It also provides individualized learning for students as some of them use the chance to replay and pause the online lecture to grasp it well according to their own pace.

Statement of the problem

In light of review literature and results of the pilot study, there is a deficiency in English listening skills among Egyptian secondary schoolers due to disregarding them or using regular methods to teach them. This problem, if not properly handed, may lead to secondary students’ failure to achieve some of the intended learning outcomes of ELT in Egypt and weakness of students’ self-efficacy. Therefore, the researcher tries to develop English listening skills and self-efficacy by using flipped classroom activities.

Questions of the study
1. What are listening skills included in Hello English course for first secondary schoolers?
2. What are the features of flipped classroom activities that may develop such skills?
3. What is the effect of flipped classroom activities on developing English listening skill of the first secondary schoolers?
4. What is the effect of flipped classroom activities on developing self-efficacy of the first secondary schoolers?

Aims of the study

This study aimed at:
1. Developing English listening skills of secondary schoolers.
2. Enhancing secondary schoolers’ self-efficacy.

Significance of the study

1. Directing the attention of teachers of English to the importance of flipped classroom strategy in developing students’ English listening skills.
2. Providing secondary stage students with an effective strategy which enables them to enhance their communication skills properly.
3. Helping the secondary schoolers to develop their self-efficacy and gain self-confidence.
4. Providing curriculum designers and developers with a new insight about how to use flipped classroom activities to develop English listening skills and self-efficacy.

Hypotheses

1. There is a statistically significant difference at 0.01 level between the mean score of the experimental and control groups in listening posttest in favour of the experimental group.
2. There is a statistically significant difference at 0.01 level between the mean score of the pre and post listening of the experimental group in favour of the posttest.
3. There is a statistically significant difference at 0.01 level between the mean score of the experimental and control groups in self-efficacy scale in favour of the experimental group.

7. Definition of Term
   - Listening skills
     The researcher operationally defined listening skills as the skills which secondary schoolers use to comprehend a listening text appropriately and respond actively.
   - Flipped classroom activities
     In the current study, flipped classroom activities can be defined as teaching tasks based on flipped classroom strategy to develop listening skills and self-efficacy of secondary schoolers.
   - Self efficacy
     The researcher operationally defined self-efficacy as secondary schoolers' feelings that they are able to listen well and do listening tasks and activities successfully after being exposed to flipped classroom activities.

Methodology
A. Research design and participants
   The research design is the quasi experimental pre-posttest. The experiment was carried out at El Sadat secondary school for boys in Ismailia during the first term of the academic year 2020-2021. The research design in this study is the two groups' pretest & posttest design. Two classes of the first secondary year were chosen purposefully. One group was assigned as the experimental group, while the second group was assigned as the control one. Each group consisted of forty male students. The experimental group was taught by using flipped classroom activities for developing listening skill and self-efficacy while the control group was taught in the regular way.
B. Instruments
   1. Listening skills checklist.
   2. Listening test.
   3. Self-efficacy scale.
   4. Flipped classroom activities for developing listening skill and self-efficacy.
C. Treatment

After developing the test, establishing its validity, and developing the learning materials, two classes at El Sadat secondary school for boys in Ismailia were chosen purposefully. Each class consisted of forty pupils. One class was assigned as the experimental group while the other class was assigned as the control group. The experiment lasted for eight weeks with two sessions per week and each session lasted for about 40 minutes. The first session was introductory where students of the experimental group were told about the aims and the importance of using flipped classroom strategy. They were also told about the tasks and activities of this strategy.

During the other sessions, the developed learning materials based on flipped classroom activities were taught to the experimental group. At the end of each session, they were evaluated to make sure that the session was successful. One of the teachers at the school was teaching the control group using the regular methods. The two groups were pre-tested in order to make sure that their level is nearly the same.

After applying flipped classroom activities to the experimental group, the researcher administrated the English listening test which was previously employed for pre-test with the same procedures to both the experimental and control groups. In addition, self-efficacy scale was administrated to both groups after the treatment. The means, standard deviation, "t" value and the effect size were computed.

Results

9.1. Results Related to the first hypothesis

The first hypothesis is "There is a statistically significant difference at 0.01 level between the mean score of the control group and experimental group in the listening posttest in favour of the experimental group". To test this hypothesis, Independent Sample T-test was used to measure if there were significant differences between the experimental group and the control one in the mean scores of the post administration of listening test in favour of the experimental group. The statistical results of the independent samples t-test are shown in the following table:

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>df</th>
<th>Significance</th>
<th>Effect Size level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>40</td>
<td>40.82</td>
<td>2.03</td>
<td>5.90</td>
<td>78</td>
<td>*0.000</td>
<td>0.560 High</td>
</tr>
<tr>
<td>Control</td>
<td>40</td>
<td>20.03</td>
<td>1.84</td>
<td>9.96</td>
<td></td>
<td>*0.000</td>
<td></td>
</tr>
</tbody>
</table>

*Significance level at 0.01
As indicated in Table (1) above, t-test value (9.96) revealed that the difference between the mean score of the control group and experimental group in listening posttest was statistically significant at 0.01. All the differences are less than 0.01, so there is a statistically significant difference between the mean score of the control group and experimental group in listening posttest in favour of the experimental group. The total standard deviation of the experimental group (5.30) is larger than the total standard deviation of the control group (4.18). Therefore, it can be concluded that flipped classroom activities improved students’ listening skill. This improvement can be illustrated by the following figure:

![Figure (1): The total score mean of the experimental and control groups in the post-test](image)

Results in table (1) also showed that according to the degree of the effect size, flipped classroom activities, when included in the course, had a higher effect on students’ listening skill than the regular methods. The mean score of both groups listening posttest were high. However, the experimental group had a higher mean score than the control one.

9.2. Results related to the second hypothesis

The second hypothesis is "There is a statistically significant difference at 0.01 level between the mean score of the pre and post listening test of the experimental group in favour of the posttest. To test this hypothesis, Paired Sample T-test was used to measure if there were significant differences between the mean score of the experimental
group in the pre administration of listening test and those of the post administration of the same test in favour of the post administration. Statistical results of the paired samples T-test are shown in the following table:

Table (2): T-test of the Experimental group in listening pre& posttest

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>df</th>
<th>Significance</th>
<th>E-S level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>40</td>
<td>24.50</td>
<td>4.18</td>
<td>19.82</td>
<td>39</td>
<td>0.00*</td>
<td>0.910</td>
</tr>
<tr>
<td>Post</td>
<td>40</td>
<td>40.82</td>
<td>5.10</td>
<td></td>
<td></td>
<td></td>
<td>High</td>
</tr>
</tbody>
</table>

*Significance level at 0.01

As indicated in table (2), the paired samples t-test revealed that the difference between the mean score of the pre and post listening test of the experimental group was statistically significant at 0.01. All the differences are less than 0.01, so there is a statistically difference between the mean score of the pre and post listening test of the experimental group in favour of the posttest. Therefore, it can be concluded that flipped classroom based activities improved students' listening skill. This improvement can be illustrated by the following figure:

![Figure (2): The total score mean of the pre and post listening test of the experimental group](image)

This means that students' mean score of the experimental group in the listening posttest is higher than their mean score in the pretest. This could be referred to the effect of flipped classroom activities in developing listening skill of the experimental group. In addition, as
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Mahmoud Mohammed Hassan

shown in table (2), the effect size of flipped classroom activities is high. Such findings have proved that flipped classroom activities had a positive effect on listening skill of the secondary schoolers.

9.3. Results related to the third hypothesis

The third hypothesis is "There is a statistically significant difference at 0.01 level between the mean score of the control group and experimental group in self-efficacy scale in favour of the experimental group". To test this hypothesis, Independent Sample T-test was used to measure if there were significant differences between the experimental group and the control one in the mean scores of the post administration of self-efficacy scale in favour of the experimental group. The statistical results of the independent t-test are shown in the following table:

Table (3): T-test of the Experimental & Control groups in the self-efficacy scale

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>df</th>
<th>Significance</th>
<th>Effect Size level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>40</td>
<td>68.48</td>
<td>11.04</td>
<td>15.59</td>
<td>78</td>
<td>0.00*</td>
<td>0.757 High</td>
</tr>
<tr>
<td>Control</td>
<td>40</td>
<td>37.98</td>
<td>4.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significance level at 0.01

As indicated in Table (3) above, the t-test revealed that the difference between the mean score of the control group and experimental group in self-efficacy scale was statistically significant at 0.01. All the differences are less than 0.01, so there is a statistically significant difference between the mean score of the control group and experimental group in the self-efficacy scale in favour of the experimental group. Therefore, it can be concluded that flipped classroom activities developed the students’ self-efficacy. This improvement can be illustrated by the following figure;
In addition, results of table (3) shows that the effect size of using flipped classroom activities is high. Such findings have proved that the flipped classroom had a positive effect on self-efficacy of the secondary schoolers. This means that flipped classroom activities had a higher effect on the students' self-efficacy than the regular methods. This indicates that the hypothesis is confirmed.

Findings of the study

This study concluded that using flipped classroom activities could enhance listening skill and self-efficacy of the secondary schoolers, where significant differences were found between the experimental and control groups in EFL listening test in favour of the experimental one. In addition, there were significant differences between the mean scores of the two groups in self-efficacy scale in favour of the experimental group.

Conclusion

In light of findings of the current study, it can be concluded that using flipped classroom activities were effective in developing secondary schoolers' listening skills and self-efficacy compared to the regular methods. This may be because it:
1. Utilizes online resources to move lectures outside the classroom so class time is freed up for active learning such as discussion and problem solving.
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2. Increases interaction between teachers and students and fosters interactive discussion.
3. Allows students to make best use of learning opportunities inside and outside the classroom.
4. Helps students take more responsibility for their own learning.
5. Promotes individualized learning for students as some of them used the opportunity to replay and pause the online lecture to absorb it better based on their own pace.
6. Makes learning process more enjoyable and interesting.
8. A student centred strategy as students learn at their own pace.
References
تنمية مهارة الاستماع والكفاءة الذاتية لدى طلبة المرحلة الثانوية باستخدام أنشطة الفصل المقابل

إعداد
محمود محمد حسن مكاوى

المستخلص:
كان الغرض من هذه الدراسة تنمية مهارة الاستماع والكفاءة الذاتية لدى طلبة المرحلة الثانوية باستخدام أنشطة إستراتيجية الفصل المقابل. واقتصرت عينة الدراسة على طلبة الصف الأول الثانوي بمدرسة السادس الثانوية العسكرية بيني بالإسماعيلية. تم اختيار فصول بالمدرسة أحداها يمثل المجموعتين الضابطية والأخرى المجموعة التجريبية بحيث كل فصل 30 طالب. قام الباحث إجراء اختبار استماع قبل كل مجموعتين لتحديد المستوى الفعلي لكلتا المجموعتين. ثم قام الباحث بإعداد البرنامج القائم على أنشطة إستراتيجية الفصل المقابل وتدريبه للمجموعة التجريبية. بعد ذلك تم تطبيق الاختبار البعدي ومقياس الكفاءة الذاتية لكلتا المجموعتين بمقام استخدام البرنامج القائم على أنشطة إستراتيجية الفصل المقابل في تنمية مهارة الاستماع والكفاءة الذاتية للمجموعة التجريبية. وبعد الحصول على البيانات المطلوبة قام الباحث بتحليلها باستخدام اختبار (ت) وحجم التأثير وتم أخذ النتائج وتحليلها ثم تفسيرها. وأشارت النتائج أن البرنامج القائم على أنشطة إستراتيجية الفصل المقابل له أثر فعال في تنمية مهارة الاستماع والكفاءة الذاتية لدى طلبة المرحلة الثانوية.

الكلمات المفتاحية: برنامج قائم على أنشطة الفصل المقابل/مهارة الاستماع/كفاءة الذاتية.