# Impact of WhatsApp Interaction on Improving L2 Speaking Skills

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**Abstract**—Mobile Assisted Language Learning (MALL) not only provides access to authentic learning resources and facilitates second language (L2) learning anytime and anywhere but also offers scope for informal learning beyond the classroom. Social media with instant messaging and multi-modal communication and information sharing provide platforms for interaction with peers and collaborative learning to hone their L2 skills. There is little research on informal learning through *WhatsApp* in enhancing L2 speaking skills. This paper studies the impact of interaction and informal learning in a *WhatsApp* group on improving a) fluency and coherence, b) lexical resource, c) grammatical range and accuracy and d) pronunciation which form the criteria for assessing speaking skills in IELTS. It also studies how participants perceive the changes in their speaking skills based on the band descriptors of IELTS. Mixed methods approach was adopted to obtain data from the group consisting of mixed ability participants (n=110) with pre and post speaking assessments and pre and post surveys. The participants were given collaborative learning activities and problem solving tasks at regular intervals for over two semesters. The results indicated statistically significant difference in their speaking skills and considerable change in their perceptions. The study has implications for both teachers and researchers of second language acquisition (SLA) for incorporating social media for interaction in the target language beyond the classroom.

**Keywords**—Mobile Assisted Language Learning, SLA, Listening, Speaking, *WhatsApp*, Informal learning, collaborative learning.

## 1    Introduction

The rapid growth in mobile devices has advanced Mobile Assisted Language Learning (MALL) which is one of the key application areas in mobile learning [1]. In a recent review of second language learning using mobile technologies, mobile phones were identified as the most popular devices (67%) of all the other portable devices [2]. The widespread ownership of smartphones enables second language (L2) learners to utilize the opportunity and engage in informal discussions beyond the classroom [3]. The growing literature on integrating smartphone applications into classroom teaching at the tertiary level has been positive [4].

The present paper attempts to explore how the social media platform *WhatsApp* can enhance L2 speaking skills of tertiary students through interaction and informal learning. A brief review of related literature is presented to place the present study in its right context in the research literature on MALL.

## 2 Related Literature

### 2.1 Learning through *WhatsApp*

Studies on *WhatsApp* have unequivocally highlighted its affordances as the real reasons for its popularity. They include: real-time messaging, easy accessibility, quick information-sharing, free voice and video calling facilities, belongingness and sociability [5] [6] [7].

In addition, photo and video capturing and sharing, document sharing, video and voice calling, creating groups with 256 members, group chatting, broadcasting, texting, audio and video messaging features [8] offer a rich scope for transforming language learning into most engaging learning experience.

As majority of MALL applications were developed targeting at individual learning, and only a few applications provide scope for CL [9], *WhatsApp* provides a promising platform for collaborative learning, informal learning and interaction in the target language.

Studies on popular instant messaging applications like *WeChat* have shown a positive result in improving L2 speaking skills in China [10]. The present study not only studies the impact of the platform on L2 speaking, but also studies perceptions of the participants on speaking assessment criteria. It also takes into consideration the distractions and unregulated messages of information [11] through sharing the objectives of the study with all the participants.

The paper assumes that in the process of solving the problems and performing the given tasks, language learning takes place as a byproduct.

### 2.2 Interaction through *WhatsApp*

Interaction with others plays a crucial role in learning L2 speaking skills. Without sufficient interaction in the target language, it is often difficult for learners to gain confidence to speak in the target language confidently and fluently. There is a robust connection between interaction and learning [12]. The ideal scenario for acquiring L2 speaking skills is finding people who are capable to interact with the learners in the target language for the sake of learning and practice [13]. Creating such supportive environment for interaction in L2 outside the classroom is one of the major challenges faced by English faculty.

*WhatsApp* amply supports in creating such beneficial L2 learning environment when teachers as facilitators can take advantage of the platform to foster productive student engagement [14] [15]. It facilitates creating ideal environment for collaborative learning in groups with a sense of identity, common purpose, and trust.

### 2.3 Informal learning through *WhatsApp*

Informal learning on *WhatsApp* helps in making learning more student-centered leading to greater learner autonomy through collaborative learning with their peers. It also helps in effectively engaging learners providing them the much-needed exposure and interaction in the target language beyond the classroom [16] [17] [18] [19].

This view gains support from the other research studies which have received a positive response for L2 learning through informal conversations [20].

As the previous studies on *WhatsApp* focused on learning language skills in the classroom, the current study focuses its impact on L2 speaking skills outside the classroom through informal learning.

Hence, the study attempts to explore the following research questions:

- **RQ1**: What is the impact of *WhatsApp* interaction and informal learning on improving Speaking skills of the participants?
- **RQ 2**: What are the participants' perceptions on the speaking assessment criteria platform in enhancing their speaking skills based on the evaluation parameters of IELTS?

## 3 Methodology

The study has adopted both quantitative and qualitative research methods in collecting and analyzing the data to obtain reliable results and to derive valid conclusions from the study. A pre and post-test procedure was adopted for answering the first research question and a pre and post-survey questionnaire was administered for the second research question.

### 3.1 Participants

Participants in the study were undergraduate engineering students belonging to different branches and years of four-year degree course. From a pool of more than 260 students who wanted to volunteer in the study, 110 students were randomly selected for the study. They were all from rural areas and first-generation learners of English with different schooling backgrounds.

### 3.2 Procedure

Pre-test and post-tests were administered at the beginning and end of the study that has spanned for two semesters. The present research study was undertaken with the twin purposes of creating space for informal learning of English outside the classroom with the latest mobile technologies and social networking platforms, and assessing the impact of the same on their speaking skills. Participants were given a variety of activities to be performed both synchronously and asynchronously.

### 3.3 Materials

Materials used in the study include:

- Smartphones based on bring your own device (BYOD) method
- *WhatsApp*
- You Tube videos
- Testmoz.com, an online assessment tool for assessing reading, grammar, vocabulary, collocations and pronunciation, etc.

### 3.4 Activities

The following L2 learning activities were designed keeping the affordances offered by the social media platform *WhatsApp* for individual as well as collaborative learning. The activities were given at two levels to accommodate the levels of possibly all the participants.

| | Activity | Mode | Description |
|---|---|---|---|
| 1 | Pronounce it (pairs / group) | Text and voice | One-participant texts any word / phrase and others respond with voice responses. |
| 2 | Fill the gap (collaborative) | Text | Gap filling with verb forms / collocations/ set phrases/ connectives etc. |
| 3 | Correct it (collaborative) | Text | Common errors are posted by participants for others to correct them. |
| 4 | Find the Odd one (pairs / group) | Text | Four words with an odd one are posted and the others have to find it. |
| 5 | Discuss it (collaborative) | Text | Discussion on any topic selected by participants. |
| 6 | Interview (One on one) | Voice/ video | One participant asks questions and the other one responds and vice versa. |
| 7 | 30 second presentation (pair/ individual) | Video | One participant prepares the script and the other presents/ One only does both. |
| 8 | Text me what I said (pairs / group) | Voice and text | One participant posts an audio clip and the other person has to text it. |
| 9 | Word clouds (collaborative) | Text | One participant creates and shares a word cloud and others form sentences. |
| 10 | Take a grammar test (individual) | Text | Multiple choice questions on grammar & sentence syntax and structure. |

### 3.5 Data collection

Data collection tools used: a) Speaking Assessment Test in the model of IELTS for 40 points with level descriptors in the evaluation and b) Questionnaire for pre-survey and post-survey based on CEFR speaking assessment criteria with band descriptors.

# 4      Results

The impact of *WhatsApp* informal learning was assessed based on the Pretest and Posttest scores of the participants in Speaking Assessment Test.

**RQ1**: What is the impact of *WhatsApp* interaction and informal learning on improving Speaking skills of the participants?

The speaking assessment tests were administered in the same pattern of IELTS speaking test. Scores were given following the level descriptors under four categories:

- Fluency and coherence
- Lexical resource
- Grammatical range and accuracy
- Pronunciation [21].

Finally, students were given a level CEFR level.

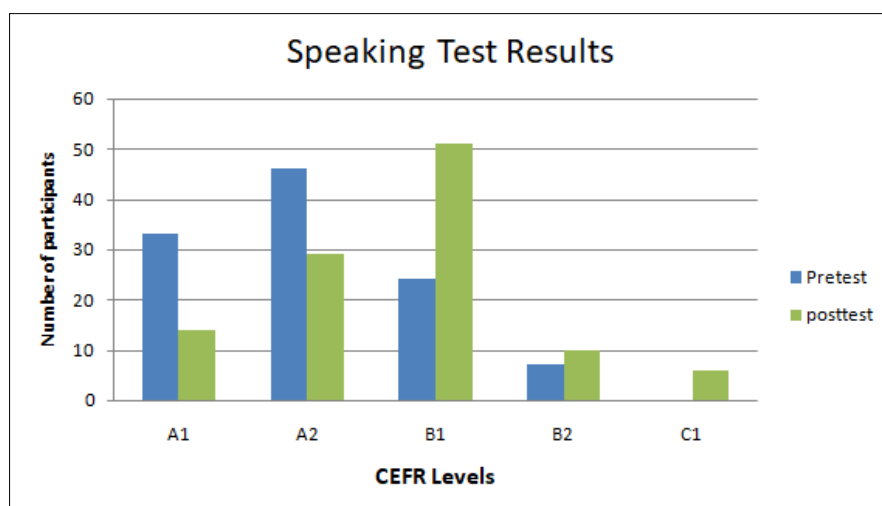The pre-test and post-test scores of the Speaking Assessment Tests were indicated in the figure 1.



**Fig. 1.**  Speaking Assessment Results (both pre and Posttest)

In the Pretest the number of participants at A1 and A2 levels was more and in the Posttest the number at both levels has come down significantly. In the Pretest there were 33 participants at A1 level and it has come down to 14 showing a remarkable improvement in their speaking. Similarly, the number of participants at A2 was 46 in the Pretest and it has come down to 29. Whereas the number at B1 level has gone up from 24 to 51 and at B2 level from 7 to 10 and six participants have reached the advanced level C.

**RQ 2**: What are the participants' perceptions on the speaking assessment criteria platform in enhancing their speaking skills based on the evaluation parameters of IELTS?

To understand the change in the perceptions of the participants about the impact informal learning on *WhatsApp* can have on their speaking skills especially on:

- Fluency and coherence
- Lexical resource
- Grammatical range and accuracy
- Pronunciation, a pre and post-survey questionnaire were administered.

Figure 2 represents the views of the participants before the beginning of the study. Participants were asked to express their opinion of each of the eight speaking level descriptors. From the Figure 2, it is clear that participants who either disagreed or could not say any opinion were more in number when put them together, than the number of participants who agreed.
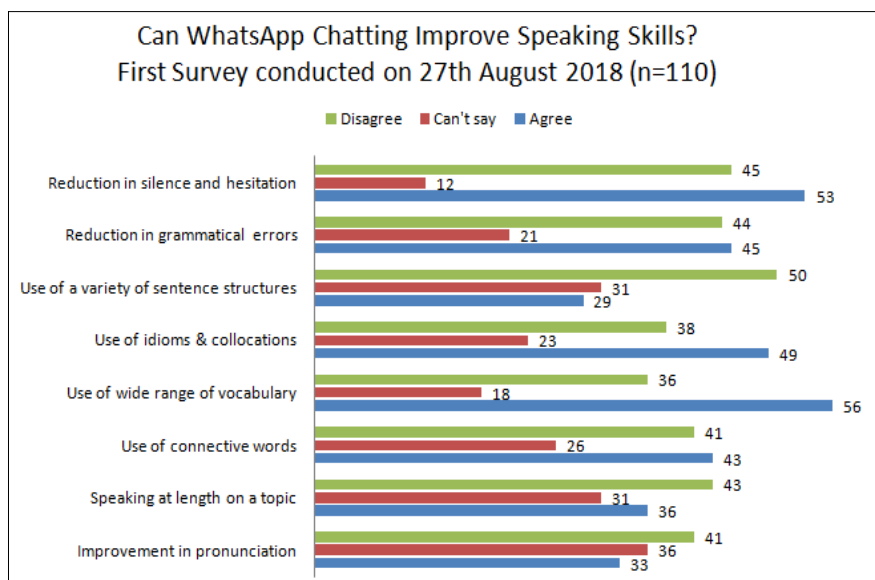


**Fig. 2.** Perceptions of the participants before the beginning of the study

The opinions of the participants can be seen in the Figure 2 and it is understandable the doubtful nature of the participants about informal learning on *WhatsApp* as many thought the platform was meant for communication purpose only and it was not meant for learning anything with impact.

The Figure 3 clearly indicates the changes in the perceptions of the participants after the completion of the study.
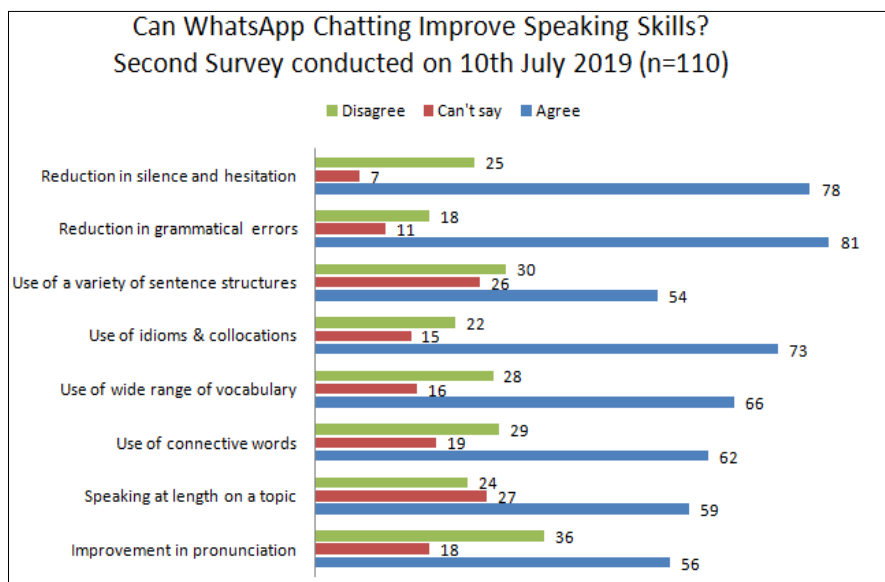
**Fig. 3.** Perceptions of the participants after the completion of the study

The results Change in participants' perceptions on the impact of *WhatsApp* Text Chatting on each of the eight descriptors of speaking assessment.

**Table 1.** Changes in perceptions before and after the study

| | Descriptors of Speaking | Before | After | Difference |
|---|---|---|---|---|
| 1 | Reduction in Silence and hesitation | 48% | 70% | 22% |
| 2 | Reduction in grammatical errors | 40.9% | 73.63% | 32.73% |
| 3 | Variety of sentence structures | 26.36% | 49.09% | 22.73% |
| 4 | Use of idioms and collocations | 44.54% | 66.36% | 21.82% |
| 5 | Use of wide range of vocabulary | 50.9% | 60% | 9.1% |
| 6 | Use of connective words | 39.09% | 56.36% | 17.27% |
| 7 | Speaking at length on a topic | 32.09% | 53.63% | 21.54% |
| 8 | Improvement in pronunciation | 30% | 50.9% | 20.9% |

Many of the participants expressed positive opinions on the study as it helped them in finding speaking partners to improve their oral skills. Though many participants were active from the beginning of the study and showed keen interest in participating in the group interaction, a few members were silent initially as they were not confident of their language skills. Nearly 40 % of the participants remained silent in the first three to four weeks of the study.

## 5        Discussion

*WhatsApp* though very convenient for instant communication and information sharing platform, it was not considered for serious academic research as a potential tool for creating space for interaction in the target language. The current study aimed at the same and the results had a positive impact on the participants. The methods can be replicated to create space for interaction in the target language.

However, the study had a few limitations. It focused only on creating space for informal learning and its impact on enhancing L2 speaking skills. Hence, there was no prescribed syllabus or predefined learning objectives. The group contained mixed ability participants reflecting the typical classrooms in developing countries. The activities were given at two levels keeping the varying language standards of the participants.

Moreover, monitoring the group members and finding the inactive group members has to be done manually by exporting the conversation in an MS Word file. If there was a feature like how many posts were contributed by each member, the platform would make it easier to monitor the inactive participants and support them.

It is also observed that the heterogeneity of the participants in the group led to different interaction levels for different tasks.  The role of the teachers was that of facilitators and performed minimum pedagogical intervention except sharing the tasks with the group and motivating the silent members in the group. Sometimes, it required to provide productive directions for the group and monitor which members are left out.

## 6        Conclusion

The attempt to create space for interaction in the target language through the most popular social media platform like *WhatsApp* has a positive impact on the participants. It can be an extension of classroom discussion and provides room for teachers for giving more practice and monitor the performance. However, it demanded a lot of commitment from the teachers who acted as facilitators and had to spend two hours after the college hours in addition to the preparation of suitable learning tasks for the group. The study has enriched the teachers as facilitators and remains a perfect example of Continuous Professional Development (CPD).

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