Impact of Audio-Lingual Materials on English Communication Skills: A Case Study of College Students in Kolkata

Kanak Kanti Bera

Abstract
The article reports the results of empirical experiments conducted with fifty Bangla-speaking college students in Kolkata hailing from rural areas to investigate the effectiveness of the audio-lingual method in learning of English as L2. With little or no exposure to L2, their competence level in using English remains very low, frequently affected by their L1 interference. For the tests, the subjects were divided into two groups, and given separately a month-long training in English communication before the final assessment. In the drilling session, the first group was trained without any audio-lingual materials, while the second group had such aids. The final test results reveal some palpable impact of audio-lingual aids on their English communicative skills. The group having these aids displays greater progress in English communication and social interaction.

Keywords: ELT, audio-lingual method, communicative skill, L2 acquisition, mother tongue influence.

1. Introduction
Even the graduating students hailing from the rural areas in West Bengal, India, are usually very weak in English communication chiefly due to the dearth of exposure to the English-speaking environment. Furthermore, their L2 is heavily influenced by their mother tongue. In spite of some L2 training at school, the spoken skill of these students has hardly improved much. To redress the issue, UGC has recommended English Communication as a compulsory course at the UG level.
The study has been motivated by the hypothetical assumption that the use of audio-lingual teaching materials can improve the scenario. The objectives here are to look into the impact of such materials on their English communicative competence, to observe whether this method has been successful in attaining what Richards and Rodgers (2001) viewed as “conversational proficiency in a variety of foreign languages” in the Indian context. Accordingly, experiments were conducted with a set of young rural students studying in the urban setting of southern Kolkata. These empirical tests revealed some definite impact of the Audio-lingual method (ALM) on the subjects showing significant improvement of their communicative skills in English as L2.

2. Literature Review

The present study has been motivated chiefly by

- the huge gap existing in the empirical research on the topic—impact of ALM on Bangla-speaking students, and
- the theoretical works of Moulton (1961), (Skinner 1957), Rivers (1964) and Weston (1968). Moulton (1961) who thought “language is speech, not writing”, emphasized the objective of the method to “speak the language” since “language is verbal behaviour” (Skinner 1957); whereas Rivers (1964) prioritized the learners’ perceptions, feelings and motivation that can shape communication in their socio-cultural context.

Conforming to these theoretical assumptions, Indian experts like Saraswathi (2004) and Thirumalai (2002) prescribed it in classrooms to enhance the learners’ speaking ability in social contexts. Nagaraj (2008) talked about the traditional methods and techniques of ELT, while Shaikh (2005) pointed out ALM as an effective method of teaching English as L2 in Indian classrooms. According to Rao and Kanthi Thilakha, “If language teachers teach as they taught earlier, then one may not achieve the required goals of teaching English in the present global scenario” (2010, 221). A successful application of this method requires the trainers to be innovative, imaginative and resourceful.

3. Scope

Fifty (50) students (cf. §5.2) from the Kolkata colleges participated as subjects in this study that spanned around 30 days. Audio-lingual materials used here included recorded materials or live electronic voice
tracks (on transistor, for example, for one-way communication) were used mostly.

4. Objectives, Research Questions and Hypothesis

a) To use listening and speaking as the basis for assisting the students in developing their reading and writing skills.

b) To evaluate how the teaching of listening and speaking skills in English through the ALM enhances English communicative skills among the subjects (cf. §5.2).

The whole study was motivated by an intuition and hypothesis that the audio-lingual teaching aids must cast a significant impact on the improvement of the participants’ English communication skill. In listening, the drill may be more beneficial for their prompt comprehension. In production too, it can effectively reduce the number of errors in their communication in real situations.

5. Methodology

As it is an empirical study, every care was taken of the setting, subjects, recording and statistical analysis to ensure the authenticity of the test and its results.

5.1 Setting

To improve the students’ English communicative skill, frequent training sessions (each of two hour duration) were conducted for the first one month (approximately), mid-January 2020 to mid-February 2020, in Baghajatin, Kolkata. Separate classes were arranged for the two batches (25 students in each) in the morning or afternoon sessions.

5.2 The Subjects

Our subjects were the students who were studying for the BA or BSc. in the south Kolkata colleges but from a Bangla-speaking rural background:

Table 1. The Subjects Divided into Two Groups Who Participated in the Experiments

<table>
<thead>
<tr>
<th>Group</th>
<th>No. of Subjects</th>
<th>Standard</th>
<th>Teaching Aids</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group-1</td>
<td>25 (10 male+15 female)</td>
<td>1st and 3rd semesters, BA or BSc.</td>
<td>Books, written study materials</td>
</tr>
<tr>
<td>Group-2</td>
<td>25 (12 male+13 female)</td>
<td></td>
<td>Books, written study materials, Audio-recorder and players, Audio CDs. Radio</td>
</tr>
</tbody>
</table>
Being graduating students in Kolkata, they had to use English (mostly written, but no real experiences of communicative English). However, they belonged to the lower middle class families in rural Bengal that hardly offered an English-speaking environment. Consequently, their English proficiency in spoken communication or interaction remained below the average.

5.3 Test Design
To measure the impact of ALM, we’ve conducted four different experiments, one prior to and three others during/after a month-long drilling and assessment:

**Table 2. The Test Design at a Glance: Different Experiments and Their Purposes**

<table>
<thead>
<tr>
<th>Experiments</th>
<th>Round</th>
<th>With Group</th>
<th>When Conducted</th>
<th>Objective: to Improve</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>—</td>
<td>Both</td>
<td>Pre-drill test</td>
<td>Existing skills (both)</td>
</tr>
<tr>
<td>II</td>
<td>1st</td>
<td>[–ALM]</td>
<td>Drill &amp; test</td>
<td>Listening skill</td>
</tr>
<tr>
<td></td>
<td>2nd</td>
<td>[+ALM]</td>
<td></td>
<td>Speaking skill</td>
</tr>
<tr>
<td>III</td>
<td>1st</td>
<td>[–ALM]</td>
<td></td>
<td>Speaking skill in terms of speech rate</td>
</tr>
<tr>
<td></td>
<td>2nd</td>
<td>[+ALM]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>—</td>
<td>Both</td>
<td>Drill &amp; test</td>
<td>Speaking skill</td>
</tr>
</tbody>
</table>

After the first experiment, subjects were divided into two groups (as Table 2 shows), who separately went through the month-long drilling sessions and final tests for evaluation. The first group (henceforth [–ALM] group) was trained in communicative English orally with only the traditional teaching aids, while the other group ([+ALM] group) learnt the skill with the help of audio-lingual materials.

For the listening skill tests and evaluation, each learner was given 10 different tasks/questions to listen to speech data live and to respond (therefore, each group was finally assessed on the basis of 10x25=250 possible responses) promptly. For the speaking and communicative skill tests, random chunks of speech data were considered. In tests and evaluation, control measures and momentum were ensured.

5.4 The Teaching Aids
Across the groups, conventional teaching aids like chalk-duster,
blackboards, books and other printed study materials were used in common. But the audio-lingual materials, additionally used for the [+ALM] group, included mostly the recorded materials or live electronic voice tracks (on radio, for example, where there is one-way communication). To that end, audio-recorder and players, audio CDs and transistor sets were frequently used as per need.

6. The Drills, Practices and the Experiment Outcome

In language learning, teaching and drilling have a significant place (Brown 2000, Larsen-Freeman 2000, Richards & Rodgers 2001, Scrivener 2005). Almost a month was devoted to drills, teaching and learning of communicative skill in English as L2. With only the traditional teaching tools, theoretical lessons about communication and social interaction were imparted to the [–ALM] group. But the [+ALM] group got the additional advantages of audio-lingual materials.

6.1 Special Drills to Develop the Listening Skill

Here, the trainer read out a passage loud and clear at a normal pace. Then, the students were asked short, objective type comprehension-based question like—

(i) Yes/No;
(ii) True/False;
(iii) Answer in one word;
(iv) Synonyms-Antonyms.

Then, the passage was read again to the trainees at a slower pace feedback was invited through other (but similar) questions. This helped them improve comprehension and communication.

6.2 Special Drills to Develop the Speaking Skill

- **Introductory phase (for 2 minutes):** It was done to initiate trainees into speaking. Here the trainer asked “Where do you live?”, “What are your hobbies?” etc.
- **Extempore speech (for 3-4 minutes):** The trainer gave each pair of trainees a topic to speak on. One minute was given to the pair to discuss the topic among themselves before starting to speak. Then they were asked questions on the topic.
- **Problem-solving and assessment:** When asked certain problem-solving questions, the trainees were marked (though not considered
for final evaluation) on four points: interactive competence, vocabulary, pronunciation and fluency, all of which are given equal importance.

6.3 Drilling Methods Followed

In the interactive drilling sessions, certain tasks were provided to the learners in ample measures. These tasks aimed at initiating the learners into a four-fold task with definite patterns, as follows:

- **Repetition**: Repetition helped the trainees to practise speaking or communication skills. The trainer drilled them in the use of grammar by asking them to repeat a sentence verbatim, e.g.:
  
  Trainer: I want to go home.
  Trainees: I want to go home.

- **Inflection**: The trainer then used a word or a sentence and the trainees changed the form:
  
  Trainer: They thank me.
  Trainees: They thanked me.

- **Replacement**: The trainer then uttered a sentence and the trainees added a word in that sentence:
  
  Trainer: I love studying.
  Trainees: I love playing.

- **Restatement**: In the last step, the trainer uttered a sentence and the trainees rephrased it:
  
  Trainer: Ask for my permission to leave.
  Trainees: May I leave?

These dialogues helped the trainees learn new vocabulary and language patterns through imitation and repetition. Grammatical rules were not provided directly, but induced through the examples given. Trainees learnt the patterns the way they were presented in the dialogue. Interactions happened, but these interactive sessions were directed and controlled by the trainer.

6.4 Assessment and Evaluation

On completion of the month-long drilling session, the attainments of two groups were evaluated and compared. As regards the ‘modes’ in mapping their attainments in communicative skill, achievements of the groups have been quantified on the basis of error frequency. To this end,
different speech acts in the controlled communicative contexts were evaluated in terms of their relative accuracy. The means of evaluation included:

**For Listening Skills:**

(i) Passage reading and comprehension tests;
(ii) Story-telling and comprehension tests;
(iii) Casual conversation in the class interviews/question-answer sessions.

**For Spoken Skills:**

(i) Group Discussion: [–ALM] group or [+ALM] group was further divided into sub-groups each having 5 members and they were given a topic for group discussion.
(ii) Role-play in life-like situations;
(iii) Casual conversation in the class/interviews/question-answer sessions.

These activities were taken special care of during the drills. The relative accuracy measured through the participants’ error frequency was used for quantification and statistical analysis.

**7. Findings: Statistics and Analysis**

In measuring the learners’ attainments, trainees’ pre-drill and post-drill performances were compared in terms of error frequency and speech rate in their spoken English as L2.

**Experiment I**

At this initial stage (i.e. before drilling sessions started), existing linguistic and communicative skills of the trainees were measured. For this first experiment, no separate groups were formed. Out of the total 50 trainees, performances of 25 trainees (randomly chosen) in the form of ten responses from each (10x25=250 responses) were taken into consideration and the statistical findings were used subsequently as pre-drill English efficiencies for the inter-group comparison after the drilling sessions. Therefore, the results on the existing linguistics skills are the same across groups that were formed subsequently for the last three experiments. In their listening skills, many learners were found to have problems like lack of comprehension.
The following figure shows the existing level of listening skills for both the groups of learners:

**Figure 1.** Pre-Drill Listening Performances and Errors by the Learners in L2 Communication

![Bar graph showing listening skills](image)

The figure shows the existing level of perceptual of the trainees. These findings would be compared to the post-drill and post-practice session performances.

Now, the existing level of their production skills has been measured for (i) grammar, (ii) phatic expression, (iii) choice of words, and (iv) pronunciation. This search yields the following results about the existing efficiency of the learners (assessed on the basis of quantity of errors/mistakes):

**Figure 2.** Pre-Drill Production Performances and Errors by the Learners in L2 Communication

![Bar graph showing production errors](image)
It shows the least number of mistakes in the phatic expressions. Whereas maximum instances of erroneous uses occur in pronunciation and grammar. It was observed that, common grammatical mistakes/ errors made by the learners before the drill were in prepositions, tenses, subject-verb agreement and other collocations.

Regarding the fluency and pace, the whole contingent of 50 trainees exhibits a certain amount of weakness. Again making a random selection of 25 trainees, and from their extempore spoken conversation (may be a sentence or a single word/small expression), speech data of 30 minutes per trainee were picked up and examined for their speech rate. Figure 3 shows the approximate number of expressions each of them uttered in their allotted 30 minutes of speech data (The ‘Average’ would be compared later to the last three experiment results):

**Figure 3.** Pre-Drill Speech Rate in L2 Communication Observed in the Select Trainees

So, before the drill, there are no significant differences across these two groups of trainees in their fluency and speech rate. This finding will help us assess the true impact of the drill and practices. Now the question is: compared to this scenario, can the impact of the ALMs ensure better proficiency of the learners? It is time to address the question now.

**Experiment II**

The forthcoming experiments will look into the effect the ALMs in the proficiency building of the trainees. Comparative performances by the two groups of trainees, one without the help of ALM and the other with the help, are as in the following table (numbers indicate instances):
Table 3. Post-Drill Improvement in Communicative English Listening Skill Across Groups

<table>
<thead>
<tr>
<th></th>
<th>Prompt Reply</th>
<th>Questions Repeated</th>
<th>No Comprehension</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Once</td>
<td>Twice</td>
</tr>
<tr>
<td>Pre-drill</td>
<td>132</td>
<td>67</td>
<td>31</td>
</tr>
<tr>
<td>Post-drill</td>
<td>141</td>
<td>62</td>
<td>28</td>
</tr>
<tr>
<td>Rate (%) of improvement</td>
<td>06.82%</td>
<td>7.46%</td>
<td>9.68%</td>
</tr>
<tr>
<td>Post-drill</td>
<td>198</td>
<td>43</td>
<td>07</td>
</tr>
<tr>
<td>Rate (%) of improvement</td>
<td>50.00%</td>
<td>35.82%</td>
<td>77.42%</td>
</tr>
</tbody>
</table>

It shows, even without the assistance of audio-lingual aids, there are some improvements. But the ALM is even more effective in improving the listening and comprehension skills. Here the trainees attain proficiency by around 50 per cent or more consistently.

[Round-ONE]

Findings above have been graphically presented for a better understanding of the implications. First the achievement or improvement of the trainees having no ALM aids has been presented:

Figure 4. Comparison Between the Pre-Drill vs. Post-Drill Listening Performances by the [–ALM] Group of Learners

They are obviously showing some improvements, as they require now less number of repetitions by the tutors. They are being more able now
to grasp the ideas and give prompt replies on hearing the expression/questions only once.

[Round-TWO]

The following figure displays the huge impact of the ALM on the trainees’ perception skills.

**Figure 5.** Comparison Between the Pre-Drill vs. Post-Drill Listening Performances by the [+ALM] Group of Learners

Non-perception (in spite of repetitions by the tutors) has come down to only 3 cases, whereas they are mostly prompt now in replying.

**Experiment III**

The other experiments would look into and assess their production skills and improvements there. The findings are captured statistically in Table 4:

**Table 4.** Post-Drill Improvement in Communicative English Production Across Groups (1)

<table>
<thead>
<tr>
<th>Error-Count</th>
<th>Grammar</th>
<th>Phatic</th>
<th>Vocabulary</th>
<th>Pronunciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-drill</td>
<td>127</td>
<td>16</td>
<td>56</td>
<td>117</td>
</tr>
<tr>
<td>Post-drill</td>
<td>106</td>
<td>09</td>
<td>44</td>
<td>111</td>
</tr>
<tr>
<td>Rate (%) of improvement</td>
<td>16.54%</td>
<td>43.75%</td>
<td>21.43%</td>
<td>5.13%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>[+ALM] Group</th>
<th></th>
<th>[-ALM] Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-drill</td>
<td>71</td>
<td>02</td>
<td>35</td>
</tr>
<tr>
<td>Rate (%) of improvement</td>
<td>44.09%</td>
<td>87.50%</td>
<td>37.50%</td>
</tr>
</tbody>
</table>
Here also the group with ALM facility showed definite improvements in grammar, phatic communion and vocabulary, but not so much in pronunciation.

[Round-ONE]

Figure 6 below shows the attainments of the trainees studying without the ALMs.

**Figure 6.** Comparison Between the Pre-Drill vs. Post-Drill Production Errors Committed by the [-ALM] Group of Learners

In all the four areas they are improving, but the pace of improvement is rather slow and often negligible.

[Round-TWO]

Now, the utility of ALMs has become more obvious. The improvement is striking enough and almost radical in some areas.

**Figure 7.** Comparison Between the Pre-Drill vs. Post-Drill Production Errors Committed by the [+ALM] Group of Learners
The learners are now able to communicate with more perfection, as it is shown here that in all the four areas they are making fewer mistakes. The pronunciation improvement is not fully satisfactory here. In all probability, their communicative English, especially the pronunciation is still influenced by their mother tongue.

**Experiment IV**

However, attainment in the speech rate and fluency has been measured directly in terms of the quantitative measurement of time versus utterances ratio, as shown by the difference between the pre-drill and post-drill ratio. From the learners’ performances in all their communicative acts, a certain temporal block is randomly picked and considered. In a given time frame of 15 minutes, the number of utterances by the select speakers have been considered and averaged for the whole group. The results follow:

**Table 5. Post-Drill Improvement in Communicative English Production Across Groups (2)**

<table>
<thead>
<tr>
<th>Speech Rate</th>
<th>[−ALM] Group</th>
<th>[+ALM] Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-drill</td>
<td>243</td>
<td>243</td>
</tr>
<tr>
<td>Post-drill</td>
<td>269</td>
<td>324</td>
</tr>
<tr>
<td>Rate (%) of improvement</td>
<td>10.60%</td>
<td>33.33%</td>
</tr>
</tbody>
</table>

Let us present these findings graphically:

**Figure 8.** Comparison Between the Pre-Drill vs. Post-Drill Speech Rate in L2 Communication Observed Across the Groups
It revealed that in the 30-minute window randomly chosen, post-drill performances displayed significant improvements for both the [-ALM] and [+ALM] groups, though ALMs had evidently a more positive and stronger impact on the trainees’ progress.

Thus, the assessment tests and statistical measurements of the learners’ respective achievements reveal that the group having the audio-lingual aids could display much better progress in social interaction and communication in English.

8. Conclusion

Thus, test results confirmed that the drilling techniques and pattern were fruitful pedagogically. This study is very relevant today, as it shows the effectiveness of modern technologies in the classroom for developing language skills. It is the age of technology and the language trainers must adapt themselves to the changing requirements. From the trainees’ perspective, Chastain (1971) wanted the method to fulfil their intellectual needs. In fact, the ALM provides the trainers with opportunities to vary the presentation of material (recorded or non-recorded). It guides them to the interesting and intriguing situations where they will feel an urge to be expressive through what they have learned.

But ALM has its weak sides as well, as mentioned by Albert Valdman (1904) who criticized its over-emphasis on ‘oral accuracy’, by Decanny (1963) who advocated a spontaneous and lively stimulus that can make ALM a success in the classroom.

Despite all these, it is evident that the students’ performances improved significantly with these audio-lingual aids. Simultaneous use of live conversation, interaction and audio-recorders (erstwhile tape recorder or more updated recorders like smart phones) can be of great help and encouragement in the teaching of structural patterns of English and in promoting the flow of certain key words and phrases as opposed to the dreary syllabic pronunciation typical of the way a child speaks. It trains learners in their listening and speaking skills. The audio-clips used focus on paying adequate attention to punctuation and intonation so that the learners, from the very onset, hear the correct and accurate pronunciation. Listening to the recordings helps them to rectify their diction and improve on their speaking skill. Significantly, the drilling sessions were conducted in English, putting aside the L₁ altogether. This
separation helped the trainees to develop better intuitions about English usages, since the native language and target language (English) have separate linguistic systems. They were kept apart, so that the former did not interfere much with the trainees’ acquisition of the latter.

In the statistical measurement, there might be certain lapses or limitations, but still it can be claimed that such lapses can cast a negligible impact on the final results. In doing the measurement, we cannot always expect exact values. Values are often varying, since these depend on so many factors and variables. Given this inaccuracy and approximation, we need to control the environments to the best of our ability to get the second best values.

References


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