

Teaching Written English through Interactive Approach: An Intervention for Hearing Impaired Learners

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Abstract

The present study reports on the effectiveness of Interactive Writing (IW) as an intervention in teaching written English language to Hearing Impaired (H/I) learners. Students' writing skills were measured before and after the intervention of ten weeks spread over a semester. The written language was categorized into four areas: Organization, Contextual Language, Conventions and Total Word Count. Each area was further defined by sub-components and the assessment of students' writing skills was done through measuring their performance in each area. The findings of this study reveal that IW had a positive impact on the writing abilities of the H/I students.

Keywords: Hearing Impaired, learning English, interactive writing, literacy

Introduction

According to the data provided by Office of Registrar General and Census Commissioner, India in *2011 Census Data*, approximately twenty-six million people in India are disabled. Of this twenty-six million disabled population five million people are suffering from hearing loss. The total literate population with hearing loss is reported to be around two million only. The statistics on literacy of H/I population in India provides a grim picture of their educational and employability status. The importance of reading and writing for H/I persons is same as listening and speaking in hearing people. While a hearing person is gifted with both listening and reading as receptive skills, and speaking and writing as expressive skills; the H/I persons (who do not have enough access to oral-aural mode of communication) on the other hand have only reading and writing at their disposal. Hence, in order to communicate with the hearing community, the H/I persons should have mastery on their receptive and expressive abilities.

Since the beginning of the Deaf Studies in 16th century, literacy had been an important part of the curriculum. The first few educators of the H/I happened to be monks from Spanish monasteries who had to practice silence during different parts of a day and gestures were commonly used in the moments of silence by these vowed monks. Because hearing impairment (H/It) was seen as a deliberate punishment by God for those who failed to expiate the sins of past lives, the persons with hearing loss were either left unattended or were only allowed to work as cheap slaves. But, the H/I children of royal blood could not be treated as slaves and hence they were sent to the monasteries for training. The medieval educators were found to have invented new techniques for teaching the H/I children the skills of reading, writing and speaking. Velasco brothers are the earliest example of H/I children from Spanish nobility tutored by Pedro Ponce de León, a Benedictine monk and the first educator of deaf. Though there are no records available on the techniques used by the monk for teaching the Velasco brothers but his success at teaching literacy “remains a standard that present-day educators should regard with envy and strive to attain” (Moore 40).

Many educators throughout 17th and 18th centuries experimented and developed new techniques of teaching literacy to H/I learners. Some prominent techniques involved the use of visual gestural medium which consists of gestures, hand-shapes, signing etc. and also the use of oral language. For most part of 19th and 20th century, the debate over the use of signing and oral language continued. The advocates of oral-only method believed that signing or visual mode of communication resulted in isolation of H/I people whereas the supporters of oral-manual method viewed and supported sign language as the “natural language” of H/I. Due to this difference of perception in educators, the real issue-“literacy” remained somewhat ignored. The need of literacy learning was again felt in mid-20th century with the development of technology and industry in Europe and the United States. Literacy was the only key to open the window of opportunity for the H/I adults. This also resulted in growing research on literacy development in H/I children.

The earliest research involved comparative studies on reading and writing abilities of hearing and H/I students. Without a doubt, research on reading skills of H/I students started earlier because the receptive skills in these students were given more importance than their expression. The result was that the research on writing in H/I children lagged significantly behind research on their reading skills (274). However, the available studies on writing of H/I children indicate that they face more difficulties in mastering the writing skills as compared to the hearing children. The findings of studies conducted by Wells in 1942, Simmons in 1959 and Myklebust in 1964 showed significant differences between the writing samples of hearing and H/I students. The writing of H/I children was found to be shorter, simpler, repetitive and less flexible. They tend to use simple sentences and redundant vocabulary whereas the writing

samples of hearing students of same age had unique vocabulary and lesser lexical and grammatical errors. The cohesion was either missing, or relatively fewer cohesive markers were used by the H/I learners (De Villiers; Maxwell and Falick). By the 1970s, the educators felt the need to focus on writing as a process alongside product. The focus was shifted from writing being a goal to actually using it as an expressive skill and a creative activity.

Earlier, strategies and systems like Fitzgerald key, Apple tree, the Rhode Island Curriculum, TSA Syntax system were used which focused exclusively on lexical, grammatical and syntactical expression of H/I students. Later on, the process-oriented approaches were developed which focused not only on the conventional orthographic elements but the overall expression. Writing of personal and informative narratives was encouraged to generate content and discourse. The discourse was later examined to investigate the effect of process on written expression of the H/I students. Interactive Writing was one such approach which was developed with an aim to help the students in developing their writing skills. Though, this approach had been used in numerous studies with hearing students, the use of IW as an intervention with H/I writers began very late. Strassman and Schirmer in a review of different instructional approaches (for teaching writing to H/I students) referred to three studies (two by Wolbers conducted in 2008 and 2009; and one by Wolbers, Dostal and Bowers in 2012). The studies had IW and Strategic and Interactive Writing Instruction (SIWI) as an intervention for teaching writing skills to students who were H/I and hard of hearing. The reviewers claimed that of all the studies (based on process-oriented approach) reviewed, the studies on the use of SIWI cognitive apprenticeship approach were found most effective (173) and in all three studies, writing ability of H/I students improved significantly. The review was published in 2012 and out of 16 studies selected for the review, only three were based on interactive instruction. Keeping in mind the effectiveness of IW with H/I writers outside India and the dearth of data on literacy levels of H/I learners in India, this study was conducted in special schools for Deaf in Punjab. The study has pre-lingual H/I learners as participants who were taught written English through IW approach.

Literature Review

The term “interactive writing” was first coined by the educators from Ohio State University in 1991. They were inspired by Moira McKenzie’s shared writing and developed a new approach which was slightly modified in the manner that the teacher “shares the pen” with a group of students while constructing a text. Prior to the development of this new approach, the educators already had language experience approach, shared writing and independent writing.

Although language experience and shared writing demands active involvement of children in the writing process, they do not share the pen and the teacher acts as a scribe. In language experience approach, the writing process is demonstrated to the students while the

teacher creates the text. Similarly, in shared writing also, the teacher acts as scribe and the text is constructed for the purpose of reading it later. The teacher collaborates with the students in planning and constructing the text. The sequence of events and ideas are narrated by the students which are expressed in writing by the teacher.

The interactive writing, on the other hand, demands engagement of students in construction of text. The level of involvement of individual student depends on his understanding of specific conventions of writing. It is decided by the teacher as when should a student be involved in the writing and which student should be called upon to write. Unlike interactive writing, independent writing allows the students to construct the text on their own. The role of teacher is minimal in independent writing and the student identifies himself as a writer. Hence, interactive writing strikes a right balance between the roles played by the teacher and her students. It provides a suitable environment for the development of students' creative and communicative skills.

In this intervention, there were some modifications introduced in order to make the writing process more specialized according to the needs of the H/I students. Since 1991, when IW was introduced by the educators of Ohio State University, the approach was first used with H/I learners in 2008 in a study conducted by Wolbers. The study involved 16 deaf and hard of hearing students as participants. The intervention lasted for 21 days. To investigate the effectiveness of IW, the students' writing samples were examined on four parameters: primary traits, contextual language, contextual conventions and total word count. In addition to their writing ability, the reading and editing/revising skills of H/I learners were also assessed.

The findings of this study indicated that except for total word count and contextual conventions, significant gains were reported in all four areas. Similarly, in a study conducted by Giddens in 2009, the IW was used as an intervention for six weeks with three H/I students at kindergarten level. The study reported that there was no regression reported in the writing abilities from pre-to-post intervention stage. Moreover, the students showed significant gains in primary traits and lower-order writing skills.

In 2014, Dostal and Wolbers employed an intervention based on Strategic and Interactive Writing Instruction (SIWI), which involved the use of strategies for teaching written language to H/I learners. The study consisted of 23 H/I students from five classrooms and the intervention lasted for ten weeks. After the analyses of writing samples collected from the H/I students, it was found that the written expression had significantly improved during intervention. Statistically significant gains were reported in total number of words and total number of T-units. There are a few more studies conducted by Williams in 2011 and Karasu in 2018 which reported positive

impact of IW instruction with H/I writers. It was found through these studies that not only students' writing skills but reading skills and expressive language (sign language) were also improved during the intervention.

Methodology

This study follows a pretest/posttest approach to investigate the effectiveness of IW with H/I students of 9th and 10th grade levels. The school-level was selected keeping in mind the lack of research with H/I students beyond middle-grade levels. Also, it was found that with the growing age, the H/I learners show little progress in literacy.

The primary research question that is addressed in this study is: Do H/I students in experimental group make progress in writing when they receive instruction through IW?

The study was conducted in three schools for Deaf in Punjab. The participants include 50 H/I who were divided in experimental and control groups. While the experimental group received IW instruction for written English, the control group was taught writing through conventional method. Three female hearing teachers with at least five years of teaching experience were also a part of this study. The teachers had Diploma in Special Education (Hearing Impairment) as their educational qualifications and they were proficient in ISL and Signed English. All the schools had Total Communication as method of communication with H/I students. The students (mean age=15.3 years and mean hearing loss= 94dB) were not very proficient in English based sign system and speech but used ISL with fluency. The intervention of 10-weeks was spread over a semester and there were around sixty IW sessions of 30 to 45 minutes each. The sessions were planned according to the subject matter decided by the teachers. In the end of every week, the number of sessions for the next week and the content for writing was decided and the lesson plans were developed accordingly. With the exception of a few sessions, the researcher was present in all sessions as an observer.

The specialized modifications in the intervention include:

- 1) The lesson plans were designed according to the topics decided by the teacher for teaching written English. The topics were based either on children's literature or a familiar event or experience. The stories/chapters from book were only included as a part of ongoing study. The story was required to be read aloud in the classroom prior to its inclusion in the intervention. By reading aloud, it means the students should already be familiar with the sequence of events. Similarly, the event or experience based narrative should be relatable so that each student could create ideas and actively participate in the

writing process. The IW sessions involved the construction of a variety of texts such as persuasive, expository, essay-type questions and personal narratives.

- 2) The stages of writing include planning, translating, drafting, writing, editing and revising/rewriting. In the first stage (pre-writing/ planning stage), the teacher along with the students plan the topic. The students brainstorm and develop creative ideas. These ideas are somewhat unorganized at this stage, which are to be presented later in an organized manner in the form of a text.
- 3) The next stage is translation which is an important part of the writing process. In case of H/I students, the ideas cannot be directly put on to paper because the first language of these students (unlike hearing students) is a sign language which is a visual gestural mode of communication. Interestingly, sign languages do not have any written form or script and that is why it is important to translate the sign language based content into English. It was observed during the pilot study that the H/I students expressed their ideas and thoughts freely at the planning stage but when they were asked to express their content in written English, they restrict their ideas and limit the content. The reason behind this was not lack of ideas but the difficulty they face when instead of translating one word or a sentence at a time they go straight to writing in second language. Due to this, they not only miss important information but try deliberately to escape the complex process by limiting the creative content. After observing this trait in H/I children, the researcher and the teachers decided to add translation as a separate stage and the students were repeatedly reminded of this stage so that they can learn to use it while they attempt writing on their own. The translation from Indian Sign Language (ISL) to English was done through ISL glosses, drawings, chart papers and for some abstract items finger-spelling was also used. With the help of these mediums, each linguistic element of ISL could be successfully translated into written English. Here, it should be noted that the Signed System based on English was not allowed during the IW sessions. The reason behind is that most of the students were not proficient in English based signed system whereas the hearing teachers had a strong background in signed systems. In order to avoid confusion between the use of ISL and signed system, it was decided that it should be avoided during the sessions. The translation process simultaneously involved drafting of the text. The blackboard was usually divided in two parts. On one part the visual stimuli was provided. The word to word translation was also written on this side of blackboard. With the help of clues provided by the teacher, and after rereading the translated draft, actual writing happened on the other side of the blackboard. This stage was followed by the editing part wherein changes in grammar, punctuation, spelling etc. were made with explanations and examples. Then the text was ready for publishing and reading. Mostly, after every session, the researcher was asked to give the feedback which provided the writers a sense of audience and motivation to write.

Discussion

For the assessment purpose, a writing measure was given to the students in which they were told to write on different topics. In order to help them in brainstorming, some clues were also provided to them. The clues were explained (in ISL) to the students at the beginning of the text. The first item was a picture prompt.

The students were given two visual sequences in pictures and they were told to write on any one of the sequences. The first sequence was on “family lunch” and the second sequence was on “teaching in classroom”.

The second item was a situation-based writing task. The students were given a situation and they had to explain what they would have done in that situation. The third item was a personal cum informative narrative. The researcher was informed that in every six months, an educational trip is arranged for these students. The students had to explain in detail their experience in one of their trips. They were also allowed to add art-work in their writing and no time-limit was specified for the completion of the task.

In order to detect students’ progress in writing, an analytic rubric was designed after considering various writing measures already used with H/I learners. After consulting her supervisor (who had a strong background in language), the teachers (who had expertise and experience in deaf education) and the levels of proficiency in written language defined by National Institute of Open Schooling (NIOS), the researcher had introduced some modifications in the tool.

The progress was measured by categorizing the components of writing into subcomponents. For example, the first category comprised of the higher order skills. This category defined as Traits of Organization merged the skills of organization and cohesion of ideas. The category was further defined by variables such as sense of sequence, ability to organize ideas, awareness of details and sense of audience.

The other three components were contextual language (which included the number of T-units, use of passive voice, direct/indirect speech, sentence fluency, unique vocabulary etc.), conventions (which included capitalization, spelling and punctuation) and total word count. The sub-components were rated on a scale of 0 to 3 depending on fluency and the correct use of language.

In order to test students’ progress, a series of paired t-tests with designated alpha level of .05 were administered within the experimental group. The traits which showed significant gains

include organization ($t=7.82$, $p<.000$), conventions ($t=5.63$, $p<.000$) and total word count ($t=4.07$, $p<0.001$). The students did not show significant gains in contextual language. Similarly, on comparing the means of two groups, the experimental group was found to have performed better in organization and total word count. On the other hand no significant differences were found between two groups in areas on contextual language and conventions. The H/I students in experimental group were found to be more confident in providing details and important information. Most of the students had followed proper sequence of events. For example, in picture prompts, the students had followed the correct sequence as depicted in the pictures.

Similarly, in situation based writing, the student included introduction and conclusion also. The students had not showed much progress in cohesion and the ideas lacked organization. But the students put their ideas freely onto paper. Their interest in writing was reflected through the art-work they included to make their writing more expressive. Similarly, capitalization of proper nouns was also an improvement in their writing, but unfortunately they did not show much progress in the use of punctuation marks. Except for period, comma and hyphen which were commonly used by the learners, no other punctuation mark was found in their writing. The absence of quotation marks in direct speech and the repeated use of comma became a serious concern for the raters. Passive voice was not attempted by any student from experimental and control groups.

Similarly, only a few students showcased their ability to craft complex and negative sentences. Since students did not add even a single complex sentence in pre-test, it can be said that this improvement was a result of intervention. Another major improvement was the increased number of T-units and total number of interpretable words from pretest to posttest. The increased numbers are indicative of increased content and interest in students for writing.

Conclusion

The findings suggest that the intervention had a positive impact on the writing development of the H/I students. Due to some limitations, the intervention could not be continued for long, but during these ten weeks the students were found to have gained mastery over numerous areas. Most importantly, the high engagement of students in the writing process and their interest in writing is the result of interactive nature of the instruction. The aim was to provide an enriching and creative environment to students where their writing skills can be improved. In this project, the H/I students were taught writing through IW for only ten weeks and significant gains were reported in the writing abilities of the students which indicate that further research on IW with H/I students spread over a longer period can provide even better results.

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