Peer to Peer Deaf Literacy: Working with Young Deaf People and Peer Tutors in India

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Introduction

In this paper, we introduce an innovative action research project entitled "Literacy Development With Deaf Communities Using Sign Language, Peer Tuition, and Learner-Generated Online Content: Sustainable Educational Innovation". We will summarize the project rationale, its goals, and its participatory approach to learning and teaching English literacy to deaf learners in India. The project includes additional activities pursued in Ghana and Uganda.

A review of activities, from initial training to fieldwork and e-learning development, illustrates interesting surprises, challenges and creativity. Although the project is still in its early stages, with teaching having started only in September 2015, some lessons for researchers and educators working with deaf people are already emerging.

Background

The World Federation of the Deaf estimates that 80 per cent of the world's 72 million deaf sign language users live in developing countries, and that only 3 per cent of them worldwide have access to education through sign language as advocated in the UN Convention on the Rights of Persons with Disabilities (UNCRPD). In low- and middle-income countries (LMICs), far too many individuals still do not have access to adequate education, and even among children and young people with disabilities, the educational levels of the deaf are particularly dismal (Randhawa, 2006, 67). This project primarily focuses on deaf teenagers and young deaf people in India, which has one of the world's largest deaf communities with an estimated 2-3 million users of Indian Sign Language, ISL (Bhattacharya, Grover & Randhawa, 2014, 3,104).

Across India, the several hundred schools for the deaf are generally staffed by hearing teachers who do not have competence in the students' vernacular language (Indian Sign Language, ISL), and a large majority of deaf children, especially in rural areas, do not have access to these schools. Deaf children who attend mainstream schools often have minimal access to the curriculum in the absence of support. Over the last ten years, the use of ISL in educational settings has been advocated by many scholars (Sethna, Vasishta & Zeshan, 2004; Randhawa, 2006; Sahasrabudhe, 2010). There is evidence of an incipient policy change, for example, the Rehabilitation Council of India states that the option of education through sign language should be available to deaf students (RCI, 2011). However, there are virtually no human or material resources within the current educational system at any level that would allow the implementation of deaf education, as mandated by the UNCRPD. Looking at the empowering approaches to deaf communities advocated by Ladd (2003), and Bauman & Murray (2010), one must conclude that radical educational changes are best driven from within deaf communities. This in turn promotes the project's "deaf-led" approach—deaf learners, community teachers, and local trainers, all

dynamically interacting within a learning and research community. Another important objective of the project was to develop digital and mobile forms of learning and teaching that were cost-effective, adaptable to different contexts, and that could support in-class as well as individual learning.

In the Indian context, with its huge resource gap, the deaf-led approach is further motivated by the educational ground realities. Formally qualified hearing teachers without competence in ISL are unable to communicate with deaf students, and fluent deaf signers do not have formal teaching qualifications. Thus the implementation of peer teaching in the deaf community suggests itself as a potential solution to this problem.

Project Partners, Aims and Activities

Our main project partner is the National Institute of Speech and Hearing in Kerala (NISH), India. We also undertake pilot work—ascertaining the potential transferability of our approach to other deaf communities—with Lancaster University, Ghana, and with the Uganda National Association of the Deaf.

Our aims are:

- to develop and provide a peer-led English-literacy teaching programme for members of the deaf community in India;
- as part of this, to develop a bilingual e-learning platform with ISL and English content, to be used in conjunction with face-to-face tutor-led literacy teaching and self-study;
- to develop and implement a model of a learner-generated and needs-driven curriculum;
- to draft a model of effective language-teaching interventions to guide policy and further innovation; and
- to adapt the Common European Framework of Reference for Languages (CEFR) for the expression of learning outcomes in the context of deaf learners.

The Indian project activities are implemented through five deaf-led organisations (four NGOs and one school). Project staff includes three deaf research assistants based at NISH and five deaf peer tutors. The project began in June 2015, with an intensive two-week training for all staff. Virtual support and regular communication takes place with UK and India-based co-investigators, one of whom is a deaf native ISL user, and the research assistants undertake regular visits to the field sites. Classes take place at the field sites on weekday mornings for two hours, followed by two hours of lab sessions in the afternoons. Between 9 and 15 students attend each, for a total of 58 deaf learners; they are between 18 and 37 years old, with the majority being in their 20s.

The morning sessions are primarily used for classroom work involving the whole class or small groups, and are facilitated by the peer tutor. Afternoon sessions are designed to allow students to work with the online learning platform. Using Moodle as a tool, we have developed a virtual/mobile learning platform called "Sign Language to English by the Deaf" (SLEND). This platform is used for creating learning materials as well as for standardized testing of the participants' progress, and the software automatically collects data logs from participants.

The classes ran for six months (mid-September 2015–mid-March 2016). A pre-test and a learner survey were conducted to establish the students' level of competence with regard to the use of English. Tutors provided weekly observation forms including details of topics covered in the class and related exercises. They uploaded materials to SLEND such as videos of explanations of words in sign language, which

were made available to the other groups as well. Figure 1 shows how the overall usage of SLEND developed over a period of six months.

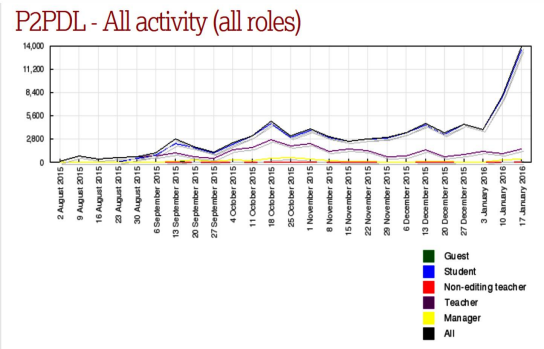

Figure 1. Frequency of SLEND access July 2015 - January 2016.

Language Teaching and Curriculum Development in the Peer-to-Peer Project

The model of instruction in this project departed from existing traditional language teaching practices in India and elsewhere, and took an ethnographic approach to the development of materials and peer tutoring. This was to ensure responsiveness to learner needs and to allow us to build on the skills available amongst the deaf community with teachers and learners supporting each other.

Our approach drew on concepts of collaborative ethnography and learner-generated curricula. Our guiding principle was to focus learning on 'real language' and 'real literacy' and develop the curriculum together with the learners. The 'real literacies' approach (Rogers et al., 1999), originally developed for adult literacy learners, postulates that learning is most useful if based on authentic texts and practices. Thus the aim was that students learn on the basis of activities, situations and texts which they would come across in real life and which were of immediate relevance to their lives. Our approach was also rooted in the understanding of literacy as a social practice (Street, 1995; Barton & Potts, 2013). Using simple ethnographic techniques, learners engaged in studying their own use of literacy, and from there, developed lessons and learning activities (Baker & Street, 1996; Ivanic et al., 2009). The second core element of the project was its blended learning approach, which enabled student groups to work and connect together online, either through PCs or smartphones, where available. E-learning through SLEND thus allowed us to build on regular engagement with digital forms of writing for the deaf in English, for example through WhatsApp. (See Sahasrabudhe, 2010 for a similar study with deaf learners in India.)

Glimpses from the Field

The two-week training at NISH was led by three of the co-authors of this article, and included Indian research staff, as well as one research assistant each from Ghana and Uganda. All trainers and trainees used ISL to communicate with the exception of Papen, so an interpreter was also used.

The main focus of project was on developing the communicative competencies of the students. In the traditional approach to teaching literacy in India, there is an emphasis on grammar and vocabulary. At schools for the deaf, students are often asked to copy English from blackboard notes or text books. In the absence of explanations or understanding on the part of the students, they are left functionally illiterate even after years of instruction. By contrast, we introduced the trainees to the idea of a practice-based, learner-generated curriculum, which focussed on real-life literacy, with "embedded" grammar and vocabulary work.

The next step in the training was for the participants to look at English in their local linguistic landscape, and to go out in groups to collect photographs of signs and examples of real-life documents in English, such as a customer feedback form from a shopping mall.

As English is an official language in India, such texts exist in abundance, thereby illustrating the need for English language skills.

Collecting texts and photographing examples of writing is a core element of the learner-led approach to curriculum development, and was much enjoyed by the trainees. We discussed how we could use a photograph of a sign or a document to create a set of lessons to teach relevant words and grammar. We began with discussions of the general meaning of the text in question, and moved on to identifying unknown words and grammatical forms. The next step was to develop and videotape explanations of words in ISL. We then designed exercises and grammar tasks (based on the features used in the text) as well as further writing tasks. The following example of a poster for a green bio toilet (see Figure 2), illustrates some unexpected issues that can arise from this approach to curriculum development.

Figure 2. Peer tutor Ankit Vishwakarma with the Green Bio-Toilet poster
(still frame from video)

Ankit tried to explain the content of the poster in sign language, but we discovered that the name Green Bio-Toilet did not mean much to the trainees, for two reasons. The first is that the association of "green" with sustainability, awareness of the environment and composting is primarily a European idea. Secondly, comprehension of the word "bio" was challenging for the trainees since the peer tutors also had limited general knowledge owing to the constraints on their education. One of them raised associations with farming and another with the body.

The tutors, research assistants and trainers together developed a potential lesson plan with the help of this poster on bio-toilets and other such texts. For example, a close-up image of a part of the text at the bottom of the poster was put on SLEND. This featured the following text (spelling and layout as original):

Dont's

Do not put bottles, tea cups, napkins, papers, gudka covers, etc. into the toilets.

Do not leave toilet without proper flushing.

Help Railways for the successes of this Green Initiative.

Go Green for the Better Future.

It is clear that while the concept of a green bio-toilet might be European, the instructional poster reveals its local situatedness (e.g. gudka [sic] covers). The text led to a discussion on the new vocabulary, including a video of explanations, which were added to the SLEND. Figure 3.1 shows the entry for "flush".

Figure 3.1. Screenshot from the glossary of the SLEND

Figure 3.2. Screenshot from the glossary of the SLEND

There is a threefold input in this case: the word has a textual explanation in English including its grammatical category, followed by an illustration of the activity of flushing a toilet and a sign language explanation of flushing (see Figure 3.2).

The next step in working with such texts was to design lessons and exercises on related English language structures, in this case on negation and imperatives. The trainees developed and tried out a series of such exercises during the training. The same step-wise approach is now being used with deaf learners at our field sites. Figure 4 shows some further partial screenshots illustrating materials from the SLEND, as developed by the groups of deaf learners and peer tutors.

Conclusions

Tutors have been working as per the approach they learned at their training, i.e. a focus on real-life uses of literacy, identified and collected together with the learners. The SLEND is populated with examples of documents found

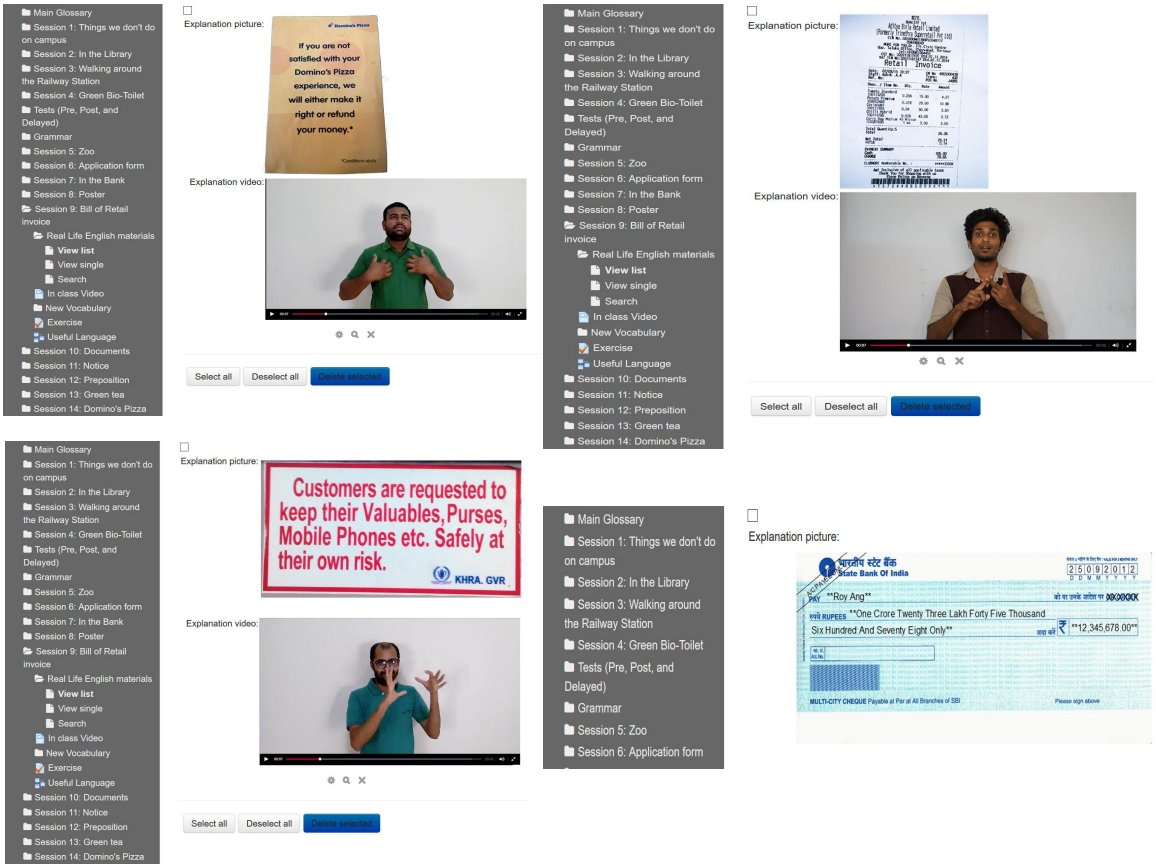

Figure 4. Learner-generated materials on the SLEND

by the students (see the list of sessions in Figure 4), words and expressions with their signed explanations, as well as quizzes and grammar exercises. These session topics also illustrate additional world knowledge (e.g. about financial transactions) that is conveyed via the SLEND to the Indian deaf learners, as gaps in world knowledge due to poor school education are one of the obstacles to literacy for them.

Although the outcomes of the project are still not completely clear, we can see some potential in the idea of providing English literacy learning for young deaf adults, who have hitherto been marginalized in their access to education, using everyday texts and experiences. Various challenges emerge from our work so far, and these have been documented in the tutors' weekly reports. They include lack of computers in some venues, unreliable internet connections and demands placed on the tutors who have to find additional resources on the internet (e.g. to teach aspects of grammar) and who need to familiarize themselves with an e-learning technology that is new to them.

Acknowledgements

This research has been supported jointly by the UK's Economic and Social Research Council (ESRC) and the Department for International Development (DFID) under the programme "ESRC/DFID Education and Development: Raising Learning Outcomes in Education Systems" (grant reference ES/M005186/1). We are particularly grateful to our deaf learners for their cooperation and to the research team at our Indian partner institution, the National Institute of Speech and Hearing (NISH) in Trivandrum, Kerala for their hard work. This team includes Deepu Manavalamamuni, Mahanmadaejaz Parasara, Tushar Viradiya, Ankit Vishwakarma, Brijesh Barot, Anu Nair, Nirav Pal, and Dagdu Jogdand. Our sincere thanks also go to the project's Indian deaf-led NGO partners: Indore Deaf Bilingual Academy; Silent Global Foundation, Thrissur; Deaf Leaders Foundation, Coimbatore; National Deaf Family Care, Pattambi; Ishara Foundation and Mook Badhir Mandal, Vadodara.

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