

Peer to Peer Deaf Literacy – working with young deaf people and peer tutors in India

Introduction

This report introduces an innovative action research project entitled “Literacy development with deaf communities using sign language, peer tuition, and learner-generated online content: Sustainable educational innovation”. The article summarises the project rationale, aims, and participatory approach to learning and teaching English literacy to deaf learners in India. The project also pursues additional activities 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 the teaching having started 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% of the world’s 72 million deaf sign language users live in developing countries, and that only 3% of all deaf signers 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 are still not accessing adequate education, and among children and young people with disabilities, the educational attainment of the deaf is particularly dismal (cf. Randhawa 2005 on northern India). This project primarily focusses 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 (Randhawa, Grover, Bhattacharya & Devy 2014).

Across India, the several hundred schools for the deaf are normally staffed by hearing teachers who do not have competence in the students’ vernacular language (Indian Sign Language, ISL), and the 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 any support. Over the last 10 years the use of ISL in educational settings has been advocated (Sethna, Vasishta & Zeshan 2004; Randhawa 2005; Sahasrabudhe 2010). There is evidence of incipient policy change, for example through the Rehabilitation Council of India supporting education through sign language as an option that

should be available to deaf students (RCI 2011). However, there are virtually no human and material resources within the current educational system at any level that would allow the implementation of deaf education as mandated by the UNCRPD. Taking views on empowering approaches to deaf communities such as in Ladd (2003) and in Bauman & Murray (2010) seriously, the conclusion must be that radical educational changes are best driven from within deaf communities. This motivates the project's "deaf-led" approach, attending to deaf learners, community teachers, and local trainers, all dynamically interacting within a learning and research community. A second important motivation was to develop digital and mobile forms of learning and teaching that are cost-effective, adaptable to different contexts and can 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.

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 include 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 every weekday morning 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 aged between 18 and 37, with the majority in their 20s.

The morning sessions are primarily for whole-class and small-group classroom work, facilitated by the peer tutor. Afternoon sessions are designed to allow students to work with the online learning platform. Using a Moodle environment, we have developed a virtual/mobile learning platform called “Sign Language to English by the Deaf” (SLEND). The platform is used for learning materials as well as standardised testing of participants’ progress, and the software automatically collects data logs from participants.

The classes will run for six months (mid-Sept 2015 – mid-March 2016). A pre-test and learner survey was used to establish students’ level of competence and current use of English. Tutors provide weekly observation forms including details of topics worked on in class and exercises. They upload materials to SLEND, for example videos of signed explanations of words, which are then available for the other groups to use. Figure 1 shows how the overall usage uptake of SLEND has developed over the past months.

P2PDL - All activity (all roles)

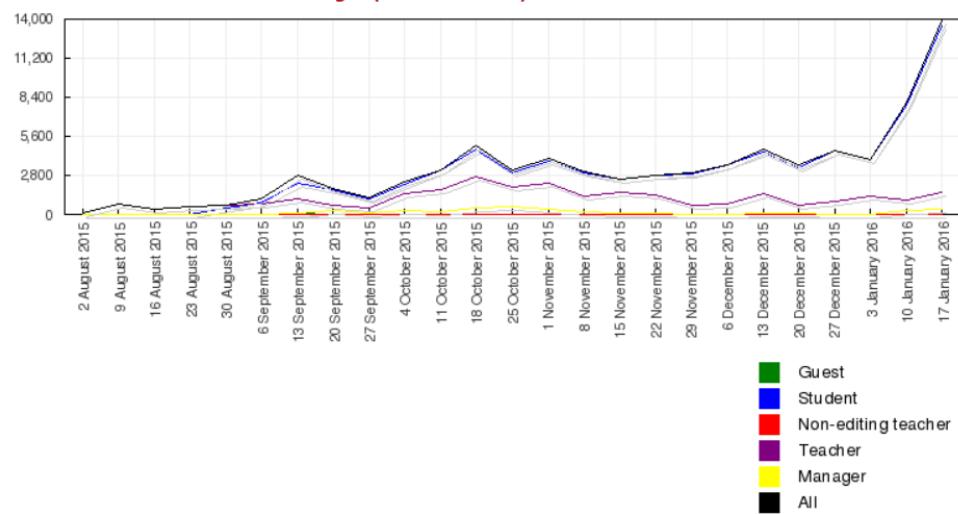


Figure 1: Frequency of SLEND access July 2015 - Jan 2016

Language teaching and curriculum development in the peer-to-peer project

The model of instruction in this project departs from existing traditional language teaching practices in India and elsewhere, and takes an ethnographic approach to the development of materials and peer tutoring. This is 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 draws on concepts of collaborative ethnography and learner-generated curricula. The guiding principle is that we 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. The aim is that students learn on the basis of activities, situations and texts which they would come across in real life and which are of immediate relevance to their lives. Our approach is also rooted in understanding of literacy as social practice (see Street 1995; Barton & Potts 2013). Using simple ethnographic techniques, learners engage in studying their own uses of literacy, and from there develop lessons and learning activities (Baker & Street 1996; Ivanic et al. 2009). The second core element is the blended learning approach, enabling student groups to work and connect together online, either through PCs or smartphones where available. E-learning through the SLEND allows us to build on Indian deaf people's regular engagement with digital forms of writing 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, and included all 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 project's focus was explained as developing students' communicative competencies. The traditional approach to teaching literacy in India is to focus in on grammar and vocabulary. At schools for the deaf, a frequent practice is mere copying of English without explanations or understanding on the part of the students, leaving them functionally illiterate even after years of instruction. By contrast, we introduced the trainees to the idea of a practice-based, learner-generated curriculum, focussed on real-life literacies, with 'embedded' grammar and vocabulary work.

In order to begin to develop such a curriculum, teachers need to know what practices students are already engaging in. A straightforward way to achieve this is

by involving students in the so-called 'clock activity' (Ivanic et al. 2009). This is a self-reflective activity to study one's own uses of literacy throughout a typical day, using an annotated clock face. In the training, everybody completed such a clock face and we then considered the place of written English in trainees' everyday lives, the idea being that tutors would later use the same approach with their students.

Looking at the clock faces, we identified a number of activities (e.g. sports) where young deaf people use English and might be required and motivated to develop their skills. Such a list serves as an initial guide for curriculum planning.

The next step in the training was for the participants to consider English in the local linguistic landscape, going out in groups to collect photographs of signs and examples of real-life documents in English, for example a customer feedback form from a shopping mall. As English is an official language in India, such texts exist in abundance, 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 considered how exactly to get from a photograph of a sign or a collected document to a set of lessons teaching relevant words and grammar. This started with discussions of the general meaning of the text in question, moving on to identifying unknown words and grammatical forms. The next steps are to develop and videotape explanations of words in ISL. Following from this, we designed exercises and grammar tasks (based on the features used in the text) as well as further writing tasks. The following example, 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)

After Ankit had tried to explain the poster's content in sign language, 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, the word "bio" was challenging since the peer tutors had limited general knowledge, owing to the constraints on their education. One of them raised associations with farming and another with the body.

With this and other examples, tutors, research assistants and trainers together developed a potential lesson plan. For example, a close-up image of some of the text in 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 can be seen that even if the concept of the green bio-toilet might be European, the instructional poster reveals its local situatedness (see use of local lexicon such as

“gudka covers”). The text facilitated discussions of new vocabulary, including the videoing of explanations, added to the SLEND. Figure 3 shows the entry for “flush”.

Flush

Verb; cleanse (something, especially a toilet) by causing large quantities of water to pass through it.



Figure 3: Screenshot from the glossary part of the SLEND

The contribution here is threefold: 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.

The next step in working with such texts is 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.

learning.lancs.ac.uk/mod/page/view.php?id=4945

learning.lancs.ac.uk/mod/folder/view.php?id=4948

Figure 4. Learner-generated materials on the SLEND

Conclusions

Tutors have been working with 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 being populated with examples of documents students found (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 the additional world knowledge (e.g. about financial transactions) that is conveyed via the SLEND, as gaps in world knowledge due to poor school education are one of the obstacles to literacy for Indian deaf learners.

Although the project's outcomes are still developing, we can see some glimpses of success in the idea of locating English literacy learning for young deaf adults, who have hitherto been marginalised in their access to education, in everyday texts and experiences. Various challenges emerge from our work so far, and are documented in the tutors' weekly reports. These include lack of computers in some venues, unreliable internet connections and the 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.

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