

Deaf peer tutors' decision-making when teaching multiliteracies to deaf learners in India, Uganda and Ghana

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1 Introduction

The purpose of this chapter is to investigate decisions made by deaf peer tutors in the context of teaching multiliteracies skills to deaf learners in India, Uganda and Ghana. Specifically, the chapter provides an analysis of a set of 'micro-case studies' wherein the peer tutors described what happened in each classroom session, including their observations of learners and their own decision-making processes.

These classes took place as part of a three-year project called 'Peer to Peer Deaf Multiliteracies: Research into a sustainable approach to the education of deaf children and young adults in the Global South' (2017-2020). This international project was led by the Institute for Sign Languages and Deaf Studies (iSLanDS) at the University of Central Lancashire, in partnership with Lancaster University. It was funded by the Economic and Social Research Council (ESRC) and the Department for International Development (DFID) through their joint scheme 'Raising Learning Outcomes in Education Systems'.

The aim of this work is to promote reading, writing, sign language, technology and multimodal communication in order to improve the education of deaf people in developing countries and address the longstanding problem of deaf people's insufficient access to employment, income, life quality and fulfilment. 'Learning the written (and spoken) languages of their environment is a crucial issue for deaf or hard-of-hearing people aiming to enhance their inclusion', because for many, the majority written language of their country is a second language, and traditional teaching methods do not compensate for this (Hilzensauer & Dotter 2012: 69). This project followed a one-year pilot (2015-2016) in which the partners harnessed 'real literacies' (Street 2012) to develop innovative ways to teach literacy to adults. These included using learner-directed methods that involved peer-to-peer teaching by local deaf tutors and a bespoke online platform called Sign Language to English for the Deaf (SLEND). The subsequent three-year project went beyond the pilot's focus on literacy by encompassing multiliteracies skills and work with

deaf children, for whom many other modes of expression (e.g. signing, drawing, scribbling, and fingerspelling) are just as important as reading and writing English. Both projects used terminology from Literacy Studies to distinguish between communication modes, e.g. signing, and literacies, e.g. reading and writing (Gillen, Ahereza & Nyarko 2020: 185).

Section 2 provides a literature review that examines some of the research on ‘real-life English’ methods (2.1), challenges in teaching deaf multiliteracies (2.2), and the socio-cultural aspects of deaf multiliteracies (2.3). Next, the method used by the authors to analyse the micro-case studies is described in section 3. The analysis presented in section 4 looks into how the topics were selected by the peer tutors (4.1), how the peer tutors embedded the topics to teach multiliteracies (4.2), and what the peer tutors observed about learners’ engagement with the topics (4.3). A conclusion with recommendations for further study is provided in section 5. The scope of this chapter does not allow for descriptions of the learners’ backgrounds, classroom environment and learning materials, but the reader may find such details elsewhere in this e-book, especially in the chapter by Pal, Webster and Zeshan in this volume and the contributions by Manavalamamuni and Ahereza in Volume 2.

2 Literature review

To consider the literature supporting the bespoke multiliteracies approach in this project, we firstly explore the notion of ‘real-life English’ which involves the use of authentic materials and meaningful contexts (2.1). Next, some of the challenges of using the multiliteracies approach are discussed (2.2), including motivating learners, addressing their anxiety, ensuring their involvement in decision-making, and combining reading and writing with sign language, fingerspelling and drawing. Finally, we present some literature on socio-cultural aspects of deaf multiliteracies (2.3), such as agency, collaboration, and the application of deaf signers’ expertise and role modelling in educational contexts.

2.1 Real-life English methods

This section looks into the literature on two aspects of the ‘real-life English’ (RLE) teaching methods that were used in the project: authentic materials and meaningful contexts. Authentic materials are those used in ‘real-life transactions’, that ‘are not doctored or simplified’ (Ahmed 2017: 182). They contrast with texts that are simplified, manipulated or staged (ibid). While simplified texts fit the belief that language skills should be acquired through ‘planned assimilation’, authentic materials correspond

to the idea that language skills are developed 'through the learner's effort to use whatever communicative resources are available to the learner to make meaning' (ibid: 182). Examples of authentic materials are photos, posters, newspaper articles, calendars, restaurant menus, flight tickets, and shop receipts (Ahmed 2017: 191).

The principles behind the use of authentic materials include that they have a 'real-world relevance' which 'enables learners to create a link between what they learn at school and how knowledge is used in practice' (Ozverir et al. 2016: 488). Learners tend to be engaged and motivated when they are acquiring knowledge that they can apply for authentic purposes, e.g. knowledge about societal problems or ways to change their behaviour (ibid). Authentic materials also require more flexible, creative and complex thought, and more interaction among learners, because these materials are typically 'ill-defined' and not presented in a staged or sequential way (ibid). Activities based on authentic materials also permit an examination of multiple perspectives, including the author, content, audience, process and form of the materials (ibid). Other benefits of authentic materials are that they help learners to gain knowledge about the cultural aspects of language and they meet learners' real needs more effectively (Ahmed 2017: 185). Gabriel and Dostal (2013) explain that authentic materials are important in assessments as well as in classroom learning, because '[if] assessment is to be instructive, it must reflect a variety of literacies and involve the open-ended interpretation and creation of real texts for real purposes' (p. 60), so that the assessment process 'contributes to students' overall motivation, engagement, and understanding of language, rather than confusing or frustrating their efforts by presenting nonsensical or decontextualized input' (p. 56).

But some scholars assert that authentic materials are too difficult for learners, and that specially-created resources to simplify learning are more appropriate (Ahmed 2017). Sometimes authentic materials are not grammatically accurate and do not correspond to the syllabus (Mishan 2005). They might also be biased toward a particular culture or community, and contain complicated, mixed structures that are not possible for beginner learners to decode (Nixon 1995). It is also tricky for the teacher to determine whether a material is actually authentic or not (Harmer 2007), and to adapt materials appropriately for the learners if they are too advanced (Ahmed 2017). For learners to make effective use of authentic materials, they need to have time to discuss them with their peers and teachers (Hulan 2010: 61).

Aside from authentic materials, another aspect of the 'real-life English' method is having a meaningful context for the language learning.

Deaf students tend to find it easier to understand sentences when they are in meaningful contexts instead of being shown in isolation (Nolen & Wilbur 1985). Because many deaf learners have fewer 'contextual and interactional experiences' compared to hearing learners, the content presented in class has a larger effect on them and it is important for this content to be as meaningful as possible (Wilbur 2000: 86). Examples of providing meaningful contexts may be taking advantage of learning in a variety of settings such as at the zoo (Wilbur 2000). Instead of just learning words for animals, learners can use the meaningful context of the zoo to discuss in sign language which animals are the most interesting, make up stories about them, and translate their stories from sign language into written English.

Motivation increases when the learning is made relevant, engaging and meaningful to the students within a particular group or class (Dörnyei 2001; Cambridge University Press 2018). This requires the teacher to be alert to learners' lives and experiences, and provide them with choices (Cambridge University Press 2018). The content should be connected to a genuine outcome that students are enthusiastic about, and that is suitably challenging, such as putting on a dramatic performance (*ibid.*).

2.2 Challenges in deaf multiliteracies

Teaching multiliteracies to deaf learners involves several challenges, some of which are explored in this section. These include increasing motivation, addressing anxiety, and ensuring flexibility and student involvement in decision-making, as well as combining multiliteracies skills (e.g. signing, reading, writing, fingerspelling, and drawing) in an effective way.

As this approach and area of research are relatively new, not all of the literature discussed here is based on work with deaf learners. For example, studies of learner anxiety and motivation have rarely focussed on classes of deaf signers led by deaf tutors. Nonetheless, it has been recognised that language anxiety and communication worries can create discomfort for students, sometimes leading to students abandoning a course due to feeling unable to function in class (Adams & Nicolson 2014). Students who have disabilities or special educational needs may be especially at risk of this kind of anxiety. Gabriel and Dostal (2013) note that there has been very little research into the ethical aspects of assessing this group of learners. Such research is urgently needed because these learners tend to be subject to more surveillance than their peers, which is meant to facilitate their progress but can actually harm their motivation and development instead.

Ideally, language teachers need to be able to recognise and mitigate anxiety so that it does not damage students' motivation. Addressing students' emotional needs requires teachers to use a learner-centred method, including 'maximum talk-time, cultural authenticity and real-life modelling' which should be used flexibly and should involve consultation with and decision-making by the learners (Adams & Nicolson 2014: 37). Motivation, as a key factor in language learning, is also sustained by the use of authentic materials and activities (Ozverir et al. 2016). This is because a common cause of demotivation is the school system's failure to make meaningful connections between the subject area that a learner is interested in, and their language learning. For example, these are frequently taught as two separate subjects. The chance to develop subject-specific knowledge has been shown to boost students' language-learning motivation (Ozverir et al. 2016).

Another challenge faced by teachers is the question of how to successfully combine the use of reading, writing, signing, fingerspelling, and drawing. In the deaf multiliteracies approach, signing provides a foundation for other literacy skills (cf. Wilbur 2000). For example, learning to fingerspell as part of acquiring a first sign language gives children the chance to connect fingerspelled letters to written letters (ibid). Fingerspelling is also a common strategy exploited by more advanced learners to identify an unknown word. They tend to fingerspell the word and produce an equivalent sign, and then re-read the sentence or paragraph and consider the semantic context to make an educated guess about the word's meaning (Andrew 2012).

Being able to sign also means that the teacher can read books in sign language to the children and display the pictures and English words and sentences at the same time (e.g. Baker 2010; Swanwick & Watson 2005; Golos et al. 2018). Teachers can use a 'guided reading approach' and ask learners to 'storysign', i.e. put signs into English word order (Shirmer & Schaffer 2010: 57). Then the teacher can lead a discussion and ask the learners to re-tell or act out the story, or draw pictures to make a storyboard (ibid). The 'guided reading approach' was created by Fountas and Pinnell (1996) and is specifically identified as a beneficial method for deaf students (Gallaudet University 2009).

Andrews (2012: 308-9) recommends that teachers add drawing and writing to their storysigning sessions 'to show deaf children the reciprocal relationship between reading and writing'. Adding drawing to the classroom activities can build multiliteracies skills and help the learners demonstrate their understanding of a story even before they are able to read English words (Andrews 2012). For the youngest learners who

do not have any writing skills yet, scribbling and drawing engages their imagination and encourages the development of their incipient written literacy and creativity (Teale & Sulzby 1986; Andrews 2012).

However, the 'storysign' technique is not unproblematic when it comes to teaching written literacy, as it does not necessarily facilitate an accurate model of English phonology, semantics, morphology, syntax and pragmatics (Andrews 2012). This means that the tutor needs to do supplementary work to increase the deaf learners' access to these aspects of literacy in a sequential, linear language such as English (*ibid*). Whilst providing learners with a robust model of sign language, including movement, space, facial expressions, raised eyebrows, head tilts, shoulder shifts, and mouth movements (e.g. Valli & Lucas 2000), teachers should be careful to metalinguistically acknowledge the fundamental differences between signing and writing, and build bridges to connect languages and forms of literacy to each other (Andrews 2012). Teachers and researchers need to generate reliable methods for testing these kinds of bilingual strategies empirically, and should not presume that telling stories in sign language is in itself a successful way of teaching children to read English texts (*ibid*). However, it is likely that 'storysigning can lay the conceptual groundwork and allow for rich classroom discussions about how English texts work if the appropriate follow-up English reading instruction is carried out' (Andrews 2012: 319).

2.3 Socio-cultural aspects of deaf multiliteracies

This section looks briefly at some of the literature on socio-cultural aspects of deaf multiliteracies, including agency and collaboration in the classroom, and the expertise and role modelling provided by deaf teachers.

The deaf multiliteracies approach is largely based on the socio-cultural perspective of learning (Vygotsky 1978), which focuses on helping learners connect new content to what they already know. This approach encompasses a need for the students to contextualise their language learning, which was challenging in the setting of this project because many of the students had such limited experiences with literacy and with formal education in general. This process of relating to learners' existing knowledge and interests requires three 'prerequisites' (Cambridge University Press 2018: 11). The first one is a supportive classroom dynamic wherein each individual learner is made to feel comfortable and valued (Dörnyei & Murphey 2003). This often requires the teacher to tell personal stories of her own, to encourage the learners to talk openly about their own interests and experiences (Cambridge University Press 2018).

The second prerequisite is changing the teacher's orientation from a lecture-style teaching to more open, collaborative learning, which may involve engaging more with students and being ready for difficulty or failure on some new tasks, without feeling disappointed. Considering the teacher as the 'expert' and therefore the 'power-holder' may create a reticence to try new methods and might obscure the situated, contextual and social aspects of learning (Adams & Nicolson 2014: 36). For effective learning of multiliteracies, the approach should be learner-centred and dialogic, involving a 'dynamic interplay between the different modes of learning in a collaborative context where students are working toward a common goal' (Hepple et al. 2014: 227). This emphasis on collaboration with and between learners led to an important outcome in the deaf literacy pilot project, namely that participants were able to 'reflexively enhance their own understandings of the complexities and richness of their existing practices, including through discussions with others' while the deaf teachers increased their awareness of language ideologies (Gillen et al. 2020: 188).

The last prerequisite is that students have enough existing knowledge to engage in the learning, and the ability to access the resources necessary to complete tasks (Cambridge University Press 2018). For deaf learners, an environment that meets these prerequisites needs to involve leadership from a bilingual or multilingual deaf teacher who can act as a linguistic and cultural role model, and support emotional well-being and identity development, especially for younger learners (e.g. Gárate 2012; Golos et al. 2018). Deaf role models may also assuage the concerns of learners' family members who may never have met a successful deaf adult, providing 'hope where there is sometimes confusion or worry' (Beckley 2016: 47). They can sometimes become mentors to the family, which makes them even more central to deaf pupils' emerging skills and understanding of the world (Golos et al. 2018). Moreover, deaf teachers open up the possibility of using 'deaf epistemology', or deaf ways of knowing, in multiliteracies learning (Andrews 2012: 318).

The role of deaf teachers is also a crucial factor in motivation. An important notion in second-language learning is that of the 'ideal L2 self', which is the learner's 'imagined version of themselves that they would ideally like to become in the future' (Cambridge University Press 2018: 3; Derman-Sparks & Edwards 2010). Deaf teachers who successfully use multiple signed and written languages can provide deaf learners with a compelling vision of their own future 'L2 self', making realistic the prospect of becoming, for example, a professional who works with a team

of practitioners and researchers from several different countries and has experience of international travel.

Without such linguistic and cultural modelling from deaf teachers, i.e. if a deaf child only has access to hearing, non-signing teachers, there is a risk that the child will build up a negative picture of their deafness (Golos et al. 2018). In other words, the child will be unlikely to develop self-acceptance and a healthy deaf identity. A hearing teacher has, by definition, never had experience as a deaf learner. This limits what the teacher can draw on to help the child build the resilience, creativity and problem-solving skills that are necessary for a deaf person to be successful in language learning and beyond (Adams & Nicolson 2014). In contrast, deaf teachers are able to harness their personal experiences as deaf students to adjust their expectations and approaches (ibid). Being able to interact with learners in their own first language and cultural context is also advantageous when designing, modifying, and administering assessments (Gabriel & Dostal 2013).

For deaf people, the social cultural environment in which they enact 'beings and doings' every day can be an extremely challenging one in which to act freely because of such linguistic barriers and cultural attitudes of the mainstream towards poor English language skills (Sen 1999). A range of elements across disparate contexts such as a teachers' knowledge of a local sign language, the availability of sign language tutoring for families, the availability of deaf education, financial means or geographical location of specific training courses held by foundations can all impact on a deaf individuals' ability to access and develop their language skills. Such factors which can enable or constrain an individual's ability to develop their skills and capabilities in key areas, language in this case, are known as 'conversion factors' (Sen 1999; Nussbaum 2007: 23–24). Capability inputs related to language or to tutoring English clearly demonstrate a range of conversion factors which either enabled or hindered peer tutors within the project in their achievement of key capabilities (achieving a capability is termed 'functioning' in the literature) (Nussbaum 2007).

Deaf teachers may be able to use their cultural and intellectual experiences to help learners build general communicative competence and agency. A Ugandan participant in the pilot project observed that 'when it comes to communicating with hearing people such as police, [some deaf people] will not try but rather call someone else to help them, arguing that they don't want people to notice their 'broken' English, [which] deprives them of the opportunity to practice and develop their English' (Gillen et al. 2020: 192). It can be observed that a lack of training amongst the police in sign language and low funding provision for

interpreters are conversion factors which have constrained participants' choice to seek assistance from the police. These incidences lend credence to the argument that structural inequalities resulting from language can have a direct impact on deaf individuals' confidence and self-esteem, thereby negatively impacting their psychological capabilities (Samman & Santos 2009).

Throughout the project, peer tutors discussed the utilisation of a range of core skills related to teaching learners. For instance, one peer tutor in India discussed 'taking responsibility' for his class, ensuring that the learners watched 'various topics for the week' on SLEND, and 'collected portfolios' ('Train ticket', June 2018, Manavalamamuni). Another peer tutor discussed making materials for classes, and lesson selection, and noted 'I choose the topic myself,' as well as stating every 'session and discussion [was] for 2 hours' ('Zoo', July 2018, Vishwakarma). The tutor stated that 'sub-topics are good for them to stand and explain and they have to know the meaning of "negative sentence structure"' (ibid). In these instances, participants have demonstrated the development of skills related to teaching, including the supervision of learners, content consideration and selection of topics for teaching, checking for learners' understanding of content and finally reflection on what works best for learners to engage with the lesson. These skills demonstrate tutors' capabilities realisation in terms of using senses, imagination and thought to prepare lessons, engage with learners and transfer literacy knowledge, as well as affiliation, whereby engaging with learners through communication in both Indian Sign Language and English has facilitated greater social integration in the learning context, on the part of the tutor as well as the learner. A linguistically accessible learning environment arguably facilitates the 'social bases of self-respect and non-humiliation' for deaf individuals, as well as prompting participation in a range of social interactions. Other realised capabilities include emotion, where positive forms of association integral to deaf learners' and deaf tutors' development are arguably being supported, and control over one's environment, more specifically, the clause that discusses 'relationships of mutual recognition with other workers' (Nussbaum 2007: 23–24). Assessing peer tutors' realisation of a range of capabilities indicates where 'development' might be occurring in the daily settings and performance of tasks and skills while teaching.

3 Data and method

A set of micro-case studies was generated by the nine peer tutors (five in India and two each in Uganda and Ghana), by filling in a template following

each class session. The UK research team provided this template, which included four main sections: A) The learner group, with a list of the students' names and ages; B) The documentation, with a list of the text files, images and videos relevant to the session; C) The topic, with a description of why the particular topic was chosen, and the sequence for teaching it; and D) The observation, with details on what the learners did and their engagement with the lesson. The peer tutors were encouraged to seek language support by email from UK-based team members to ensure that their English text was clear and contained sufficient detail for the purposes of the project. This was also in accordance with the capacity-building aspect of the project (see Webster 2014), through which deaf peer tutors are supported to attain practitioner and research experience, and eventually achieve formal qualifications to enable them to become accredited teachers. Drafting and revising their micro-case studies was thus beneficial not only in terms of facilitating a rich data set for analysis, but also helped to consolidate the peer tutors' academic skills and critical reflection on their teaching practice.

Most of the 46 micro-case studies were about 3 pages long. Some tutors included more detail than others. The per-country breakdown is provided in Table 1. Because there were more peer tutors in India than in Uganda and Ghana, there are twice as many case studies from India. In most cases, peer tutors working in schools with deaf children taught daily sessions Mondays to Fridays. Classes with adults were more variable as to the timing of the sessions, but took place several times a week with all groups. The micro-case studies rely on and synthesise information from peer tutor reports, which documented the classroom activities on a monthly basis, as well as other sources of information such as learners' portfolios, video recordings, and other project outputs. The peer tutors and research assistants were asked to select examples of learning that seemed most interesting to them, and to create micro-case studies about these themes (see Appendix).

Table 1: Number of micro-case studies in the data set

	Adults' sessions	Children's sessions	Total
India	14	9	23
Uganda	3	8	11
Ghana	6	6	12
Total	23	23	46

The authors read through the micro-case studies with particular attention to the peer tutors' insights into their decision-making. The project's

highly innovative approach to learning placed significant demands on the peer tutors with respect to selecting the RLE topics and devising ways to embed the teaching of multiliteracies into these topics. The authors used grounded theory and the constant comparative method (Glaser & Strauss 1967; Patton 2002) to develop codes for the data while reading through the micro-case studies. This was necessary due to the unprecedented nature of the deaf tutors' RLE protocol, which meant that there was no existing research base to draw on. The codes that were generated were as follows:

1. The students were interested in learning about the topic
2. The topic was a need that the students had perceived
3. The tutor and students decided the topic together
4. The tutor decided the topic on his/her own
5. The topic was dictated by the project, e.g. pre-tests
6. The topic was based on a need that the tutor had perceived in previous sessions
7. The topic was based on a need that the tutor had perceived from the tutor's own personal experience
8. The topic was based on a need that the tutor had identified using literature/research
9. The tutor chose the topic because it was a logical progression from the previous topic
10. Reason is unclear

Each micro-case study was coded with one or more of these numbers. The codes were not mutually exclusive, so more than one code was used for some of the texts, e.g. where a tutor mentions deciding the topic by himself (code 4) as well as basing this decision on a learning need that he had perceived in a previous session (code 6).

4 Analysis and discussion

This section presents a qualitative analysis and discussion of how the real-life English topics were decided by the peer tutors and students (4.1), how these topics were exploited to teach multiliteracies (4.2) and observations about learners' engagement with the topics (4.3).

4.1 How the real-life English topics were decided by the peer tutors and students

Following an overview of the variety of bases on which topics were selected for the classes of children and adults, the most common bases

are explored, namely students expressing an interest in the topic (4.1.1); and the tutor perceiving a need to teach the topic and/or selecting the topic independently (4.1.2).

The authors examined the peer tutors' descriptions of how they determined what topic to teach, and coded each mention of a reason or motivation for choosing a topic. Table 2 provides a breakdown of the coded data from 42 micro-case studies. The decisions made by students are highlighted in blue (29 occurrences in total) and those made by tutors are highlighted in green (44 occurrences in total).

Table 2: How topics were chosen for sessions, according to data from 42 micro-case studies

Rationales mentioned in micro-case studies	Number of occurrences		
	Children	Adults	Total
Students were interested in learning about the topic	4	11	15
The topic was a need that the students had perceived	0	7	7
The tutor and students decided the topic together	4	3	7
The tutor decided the topic on his/her own	16	8	24
The topic was dictated by the project, e.g. pre-tests	1	0	1
The topic was based on a need that the tutor had perceived in previous sessions	9	2	11
The topic was based on a need that the tutor had perceived from the tutor's own personal experience	1	4	5
The topic was based on a need that the tutor had identified using literature/research	2	2	4
The topic was a logical progression from the previous topic	3	2	5
Reason is unclear	2	0	2
Total	42	39	81

Some of the micro-case studies include more than one reason, so there are 81 occurrences in the table even though only 42 micro-case studies were analysed. The differences between the results for children and adults, specifically the greater tendency for the tutor to decide the topic in the

children's classes, are not surprising because when working with young primary school children, the teacher will naturally be more directive. However, when looking at the totals, it is apparent that the tutor also selected the topic in a large number of the adult classes.

4.1.1 Students expressing an interest in the topic

One of the most common reasons given in the micro-case studies for choosing a topic was that the students expressed an interest in it. Sometimes this stemmed from the students being aware of a certain use of English because of previous exposure to it, and wanting to know more about it. For example, on the topic of bank account application forms, peer tutor Manavalamamuni notes that the students 'wanted to know how to fill them in because they did not know how to apply to a new bank themselves. But they visited banks with their parents before' ('Bank application', August 2018, Manavalamamuni). It seems that their interest was based on having experienced the existence of and rationale behind these forms but not knowing how to use the forms themselves. Similarly, students chose the 'weight' topic based on having visited the market with their parents and seen food items being weighed:

They wanted to learn the RLE topic of weight and volume. The students watched the SLEND and there was also some explanation about the weight topic that was made at Happy Hands Deaf School. [...] This topic was then chosen by all of us as a group. This topic was good for them to use to buy vegetables and other things at the market, for example 1 kg, 5 kg and 500 grams etc. [...] They had been visiting the vegetable market with their parents but they did not know much about weight or volume units or types of pricing.

(*'Weight'*, October 2019, Manavalamamuni)

In other cases, students' decisions were based on what they had learned in a previous session. For example, peer tutor Manavalamamuni's students 'wanted to know about bank deposit slips' ('Bank deposit slip', Sept 2018, Manavalamamuni), because this was related to the earlier topic of bank applications, and they chose the 'train tickets' topic because they had learned about railway reservation forms in a previous session ('Train ticket', July 2018, Manavalamamuni). Their choices were also motivated by things that they had seen on television, for example the opportunity to order items from online stores ('Ordering online', November 2018,

Manavalamamuni), and the concept of Christmas as depicted on commercials:

The topic was suggested by children when they started talking about seeing an old man in a red suit and white beard during the Christmas holidays on television and on cards. I told the children that he is Santa Claus, the father of Christmas. The children then shared their experiences during the Christmas holidays. This activity aimed at helping them to improve their narrative and critical thinking skills. I then shared a story about Christmas, and they asked lots of questions. Then the children drew and coloured pictures of Santa Claus.

(‘Christmas holiday’, January 2019, Addo)

Another reason given for students’ choices was that a topic was related to the school curriculum. The ‘menstrual cycle’ topic taught by Esther in Ghana was chosen because ‘a student suggested they wanted to know more about personal hygiene and reproductive rights’, as this was part of the ‘adolescent reproductive health’ subject in the high school curriculum. Some topics were simply based on an activity that students enjoyed, such as colouring:

The topic was chosen by the peer tutor, after the learners said that they liked colouring. The colour theme was explored using sheets with empty squares and colour words on it. The children identified each colour word and filled in each box with the relevant colour. They were also provided with blank paper so they could colour one side and write the name of that colour in English on the other side. Some children showed initiative and artistic creativity by drawing and colouring in stars and triangles.

(‘Colour’, July 2018, Nankinga)

Overall, it seems clear that the peer tutors were able to use the learners’ ideas for RLE topics in many sessions. However, on several occasions the peer tutors noted that the students were unwilling or unable to select a topic; e.g. they ‘did not know how to choose a RLE topic’ (‘Application forms’, July-August 2019, Barot). This is often provided as a reason for the tutors deciding on a topic themselves.

4.1.2 The tutor perceiving a need for the topic and/or choosing a topic independently

In a large number of the micro-case studies, the peer tutors described choosing the topic themselves, often because of a need that they had perceived based on something they observed in the classroom, or an experience they had outside the classroom. Examples of the latter include seeing an 'environmental bio-toilet' whilst going home on the train ('Green bio-toilet', October 2018, Vishwakarma), filling in railway reservation forms ('Railway reservation', June 2018, Muni and Chaneu), and a shop asking them for their customer feedback ('Your shopping experience online', September 2018, Vishwakarma).

There are many instances in the micro-case studies when tutors' topic selection was based on their own observations in class of what their learners did not know or what they enjoyed doing. For example, peer tutor Kumar decided on 'food' as a topic, because 'the students knew signs for many types of food but did not know the English words' ('Working with food literacy', August 2018, Kumar), and Vishwakarma chose maps after noticing that 'the children did not know how to read place names on a map' ('Working with maps', Feb 2019, Vishwakarma). Peer tutor Nankinga observed that several children had missed classes due to toothaches and fevers, but they:

were unaware of what these words meant and what could be the causes of these conditions. To start the lesson, we focussed on identifying, signing and noting on the blackboard the various sicknesses that are common. Then I downloaded information on these diseases to show the children what causes them and how to prevent further occurrences.

(*'Sicknesses'*, March 2019, Nankinga)

In the children's classes, the tutors frequently based their decisions on what learners appeared to enjoy doing. For example, Nankinga chose to focus on verbs because of 'the children's playful nature', as well as their lack of knowledge about how to describe actions in English such as *sweeping* ('Identifying verbs', November 2018, Nankinga). Similarly, Pal noted that the children liked colouring, 'but didn't know the signs or words for different colours', which prompted him to teach colour terms ('Working with colours', Nov 2018, Pal).

4.2 How the peer tutors embedded the topics to teach multiliteracies

To teach multiliteracies skills through the topics that they and their learners selected, the peer tutors used a variety of activities and methods, including text-based materials, objects, fingerspelling, role play, videos, drawing, discussing vocabulary, and signing stories.

Text-based materials such as posters, application forms, and rail tickets were often used in the lessons to exemplify the RLE topic. For example, in the adult learners' class in Ghana, the peer tutor used a 'do and don't' poster to introduce the concept of negation and show how negative sentence structures are formed. Objects such as animal figurines were also frequently exploited. For the 'telephone' topic in Uganda, the adult learners went outside to look at telephone masts.

In some classes, the practical activities included fingerspelling, e.g. of the words for different colours ('Working with colours', Nov 2018, Pal). Role play was another way of embedding the learning that the peer tutors found to be effective. For instance, peer tutor Nankinga notes that her learners combined role play with writing, signing, and a pictorial exercise in order to consolidate their knowledge of action verbs:

[the] multiliteracies skills included role plays wherein the children practised signing. I gave *sweep* as an example of an action verb and asked the class to think of action verbs on their own and perform the corresponding action for the class. Questions followed after every action so the learners could sign what it was. Vocabulary words were written on the blackboard. Then the learners were given exercises with pictures of actions and they had to fill in the missing spaces to spell out the corresponding verb in English.

(‘Identifying verbs’, November 2018, Nankinga)

The peer tutors also used videos on some occasions. An animated video and a RLE video from the SLEND were both used by Esther to teach the 'menstrual cycle' topic in Ghana. For the 'family' topic, she exploited a combination of a video presentation made by a student, a class discussion about the video and related vocabulary words, and a role play.

Activities involving learners creating and labelling drawings were also harnessed by the peer tutors in order to embed the RLE topics and teach multiliteracies. In Uganda, peer tutor Nankinga's learners drew and labelled objects like 'rope' and actions like 'swimming', and then created sentences using these concepts such as *the children are skipping*

rope and *the children are swimming* ('Naming RLE drawings', August 2018, Nankinga).

The peer tutors also led discussions of vocabulary in several of their sessions. For example, in the session on ordering items from online stores, peer tutor Manavalamamuni led a discussion on the words *Amazon*, *discount*, *debit and credit card*, *delivery* and *order* ('Ordering online', November 2018, Manavalamamuni). He sourced example sentences from the internet and displayed the words on slides and the whiteboard, and asked the students to write sentences using *deliver*, *within* or *order*. Shirmer and Schaffer (2010: 54) note that discussing vocabulary words enables the teacher to 'provide explicit instruction on word recognition, complex syntax, figurative language, new vocabulary, and text structure as needed before, during, and after reading'. Discussions led by the teacher can also build students' confidence and general skills in conversing about a new concept, responding to others and sharing their ideas (Hulan 2010).

Telling stories through sign language appears many times in the micro-case studies as a way of embedding a RLE topic, and is supported in the literature as an effective way of engaging deaf learners and improving their metalinguistic awareness (e.g. Andrews 2012; Crume 2013; Golos et al. 2018). For Esther's 'storybook' topic, lessons were embedded by taking aspects of speech from the stories and translating them into Ghanaian Sign Language (GSL). At first, the learners were asked to sign the stories with English syntax, and then they had to change this into GSL syntax. Next, Esther asked them to get into groups and create their own stories to write in English and then tell in GSL. In previous work by Andrews (2012), the teacher placed pictures of her deaf students' favourite signs on cards with equivalent English words and example sentences. Each deaf student stood by the card showing his or her favourite sign and told a story in sign language derived from that sign.

Story-signing can be done before, during or after reading an English text as a way of supporting the learner's knowledge of the vocabulary and content so that they can interact with the text and think critically and creatively about it (Shirmer & Schaffer 2010). When learners repeatedly practise this strategy in lessons, it becomes a skill that they can apply independently with texts they encounter outside the classroom (ibid.). Moreover, Andrews (2012) observes that storysigning encourages children to find pleasure in sharing stories and gives them signing experiences that they may not receive at home. In addition to increasing their knowledge of vocabulary, syntax, signing styles, and story genres, this activity helps children develop their storytelling skills and their wider understanding of the purposes of narratives, e.g. to convey a complex or abstract idea

in a concrete, relatable way (*ibid.*). It also shows them how to use their sign language as a bridge to other languages such as English (Nover & Andrews 1998; Andrews 2012).

For the purposes of the analysis, the different ways of embedding the learning (e.g. through drawing, role play, and story-signing) have been considered separately, but in most of the sessions, the peer tutors used multiple methods. This is exemplified by peer tutor Pal, whose lesson on animals exploited pictures, photos, videos, role play, games, objects (figurines), live animals (fish), craft-making, drawing, colouring, gesturing, signing, and dramatic performance:

I explained to the children about zoos by showing a picture book. I decided to let them play the roles of zoo animals with masks. In an interesting game, there were many animal and tree toys lying on the floor. Pairs of students were asked by a third student using sign language to find a dog, and whoever found a dog first won. I planned to provide materials to the children to create animal crafts so that they could use them to tell stories after they learnt the animal topic. However they had never experienced craft-making, so I firstly started to guide the children on how to create a simple fish craft with their hands using glue, scissors, and rulers. After finishing their creations, we discussed what a fish was, and how fish live and eat. After that, I brought a small glass pot with two fish that was in the school office to show it to the children and also showed a video to them. The students identified domesticated animals. I asked them what each animal sign was, and they gestured. In the B class, the older students knew the signs for domesticated animals because in their leisure time at the Happy Hands Deaf School hostel, the A and B students mixed, playing and talking together with animal figurines. The A class students sometimes liked to teach animal signs to the B students. I started to teach them animal signs with photos and videos from my laptop as well as demonstrating humorous role play as different animals. I also asked them what animals eat and where they live. Most of them knew the answers and were interested in expressing more about their experiences of seeing common animals. However in the B class, the older children wanted to learn animal words whereas some of the youngest children found it impossible to learn the English words intentionally, so they were encouraged to focus only on the signs. I decided that we had to act as zoo animals so that they would understand the concepts. So I started creating zoo crafts and drawing and colouring animal masks with the students who chose

individual animals in class. Then they started acting really funny as zoo animals with wearing animal masks for the older children and we welcomed the staff to come and visit the 'zoo' in class. It took a week to create the masks before the learners could perform as animals in their 'zoo'. In their free time in the evenings at Happy Hands, the A-class students sometimes teach the older B-class students basic signs including animals, classroom objects, etc by using pictures in books.

(*'Animal literacy'*, Feb 2019, Pal)

Because the micro-case studies were written from the perspective of the peer tutors, a way to augment the analysis would be to hold interviews or focus groups with the learners to find out which ways of embedding the topics were most useful and meaningful for them. Deaf learners are not a homogenous group, and the peer tutors were faced with the challenge of integrating their diversity into the learning situation (cf. Adams & Nicolson 2014). Future research might attempt to look into the learners' and tutors' ideas about the connections between activity, teaching and learning, which are cultural constructs (Ollin 2008; Adams & Nicolson 2014). Using Bourdieu's notion of 'cultural capital', i.e. the norms and practices that are most valued in the classroom (Bourdieu & Passeron 1977), we might consider what assumptions the peer tutors are bringing into the classroom and to what extent they are integrating the learners' own norms and practices versus imposing their own (Zepke & Leach 2007; Ollin 2008). For example, many deaf communities have a 'collectivist' orientation wherein expressions of group solidarity are valued as much as, if not more than, individual achievement.

4.3 Peer tutors' observations about learners' engagement with the topics

Across the project countries, the peer tutors worked with a range of class sizes, divided into adult and children learners. The peer tutors suggested that there were differences in engagement between the topics amongst their learner groups. It could be argued that through teaching in a peer-to-peer sign language environment, greater numbers of opportunities for dimensions of interaction and participation between deaf and hearing peers in a learning environment were able to occur. Interaction and participation between peer tutors and learners are a crucial preliminary step that enables future peer-to-peer learning and tutoring processes to take place (Kluwin, Stinson & Colarossi 2002).

On the online platform (SLEND) the peer tutors uploaded topic materials, new vocabulary, worksheets, grammar assignments and footage of discussions in sign language, all of which was available for students to access remotely. In Uganda, one peer tutor, Tonny, commented at first that they guided students in the use of SLEND, and later students were able to use SLEND independently. The platform was used by peer tutors for revision; for instance, in the 'Money' class, they used SLEND to revise previous topics as a result of some problems with videos loading. Issues with access to the internet were cited as factors which stopped learners engaging with the material in both Uganda and Ghana.

Over time, the SLEND material began to give learners a clearer outline of ways they could contribute in future classes. After prompts through class discussion of previous topics, students began to engage more in group discussion in the class. Students also did group activities, such as making a second clock activity. As sign language users, for deaf participants in the project, given the opportunity to learn in an inclusive, sign-language dominant environment arguably had considerable advantages in fostering firstly, socialisation, and secondly, engagement and learning (Erting & Kuntze 2008: 287).

Many peer tutors also made reference to group work and the confidence of their learners. For example, when teaching about the 'telephone' topic, Tonny commented that in group work, some of the class were high in confidence while others were low in confidence. Another peer tutor, Esther, noted that in their 'Andrew Foster' class, even the weakest learners could contribute and discuss ideas – perhaps because they were already familiar with the topic. For deaf participants in the classes, upon joining a new learning environment, they would have undergone processes of socialisation, where 'novices' gain new knowledge and skills to join a social group' (Ochs 1991). Socialisation can be observed through ongoing 'language practices and social interactions' through which 'novices' acquire social and cultural competence (Ochs 1991). These processes of gaining language confidence in English, as well as competence in topic material, would have differed between individual learners, and affected the confidence of learners in the class. It has been suggested that issues of sociality in a peer-to-peer teaching and learning context range from the extent of interaction and participation of learners in a learning environment, to sociometric status and affective functioning. One study split the process of peer-to-peer socialisation into the categories of social skills, interaction and participation, sociometric status and acceptance and affective functioning (Kluwin, Stinson & Colarossi 2002).

Another quote from a peer tutor suggests where real English literacies had a strong impact upon learner engagement. The peer tutor stated that

learners were given a short sample sentence grammar using the word *buy* and its tenses. They tried but this lesson was so difficult for them, we kept repeating several times, for example “I will buy a new phone next week”. We decided to use this grammar because it was easy for them and commonly used by them. One student told me that he will buy a new smart phone soon, so I developed the grammar topic from his question about how to write this in good English. He also asked what is the difference between *buy* and *pay*. Students were confused about the words *buy*, *pay*, *sell*, and *purchase*, and their past tenses, which had taken time for them to understand, but at the end of the lesson, I was glad that some of them can now write sentences using these words.

The peer tutor here discussed the struggles of learners to engage with written materials in English, and to construct sentences in a second language. The efforts made to teach English grammar were improved and simplified for learners through linking the exercises about past and future tenses with real-life concepts that were familiar to learners.

Often, the employment of overly complex English can be off-putting for deaf learners. Some peer tutors referred to enhancing student engagement through the use of ‘activities and outdoor learning to learn by direct visual observation on the Real-life English in the environment’ (Tonny). From reports across other classes, it appears that the use of real life contexts had many positive implications for learner engagement. By drawing on contexts from real lived experience, RLE offered a promising way in which to engage learners more thoroughly in lessons. In Esther’s ‘Menstrual Cycle’ class, she commented that it had real world applications and relevance for the students, as many students in the class attributed their monthly cycle to sickness and many of the girls are worried about this so it helped them to learn more. In the ‘Air’ class, Esther suggested that ‘linking grammar to the topic helped them to understand better’, and although students were already familiar with the topic, as they had learned it in school before, by having access to more examples and RLE, her students claimed that they understood it better. It can be observed that through siting lessons within RLE, a positive impact on learners’ participation and their affective functioning was achieved, as some of the learners’ concerns or lack of knowledge about topics were addressed.

Another method through which peer tutors engaged learners in their lessons was the use of storytelling. In her 'Storybook' class, Esther commented that the storytelling encouraged her students to use their motor and cognitive skills, and that it was an exciting activity for them. It created a positive non-competitive environment for learning. Taking the view of literacy as 'the orchestration of particular language knowledge,' where the language i.e. English and the sign language, as well as the topic of study and skills required to participate in the classroom are all facets of literacy skills (Padden & Ramsey 1998: 7). Being able to both understand and later to tell stories that were personal to each learner were skilful ways in which the peer tutors engaged the learners.

Finally, learner engagement was impacted by a lack of background information, also known as incidental learning. In Esther's 'Family' class, she noted that many students struggled to identify cousins, nephews and nieces because they came from hearing families. The information is typical of details which would have been picked up by hearing children. It is clear that different routes must be taken to engage deaf learners, and address spaces in knowledge across teaching topics. However, it can be seen that where topics were familiar to learners, such as for Andrew Foster in the Ghana class, learners were more confident in expressing themselves and voicing opinions.

5 Conclusion

This chapter has looked into the decisions made by deaf peer tutors who were teaching multiliteracies skills to deaf learners in India, Uganda and Ghana. A set of 'micro-case studies' were analysed to see how the peer tutors characterised their decision-making processes and learners' uptake of the taught content and engagement in the classroom activities. The chapter began by exploring some of the literature on 'real-life English', including the use of authentic materials and meaningful contexts, and the kinds of challenges encountered when applying the multiliteracies approach, e.g. motivating and empowering learners, addressing their anxiety, and combining reading and writing with sign language, fingerspelling and drawing. Previous research into socio-cultural aspects of deaf multiliteracies was also presented, with a particular focus on agency, collaboration, and the importance of harnessing the expertise and role modelling of deaf signers.

Then, the method used to analyse the 46 micro-case studies was described, followed by a discussion of the results including how and by whom the RLE topics were decided, what classroom activities and

techniques were selected in order to use the topics to teach multiliteracies, and to what extent learners engaged with the topics. Overall, the analysis showed that the peer tutors were able to involve their students in selecting the RLE topics on many occasions, but still often had to devise topics themselves because the students did not know what an appropriate topic might be. They were able to use a fairly wide variety of methods to embed the topics, including text-based materials, drawing, fingerspelling, role play, and signing stories, with the last two proving to be particularly popular, especially amongst the children. It is unclear to what extent the peer tutors were able to build bridges from multiliteracies skills to English literacy, and what challenges they faced when making connections between signing and writing. This might be further explored by using the preliminary findings presented here to devise a fresh template with more in-depth questions for the peer tutors.

The unprecedented nature of this work created scope for valuable innovations, but also made it difficult to produce quantitative and comparative results. Future research should examine how the teaching of multiliteracies skills can be more meaningfully and empirically measured. Further studies might also look for ways to test whether and how much the provision of signing deaf tutors, i.e. deaf role models, improves deaf learners' emotional and psychological well-being, which is a trend that was observed during this project.

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Appendix

(all of the micro-case study documents)

1. India
 - a. Adults at Indore Deaf Bilingual Academy
 - Diwali
 - Bio-toilets
 - Shopping
 - The zoo
 - Flight bookings
 - Snake bites
 - Application forms
 - b. Adults at Delhi Foundation of Deaf Women
 - Railway reservation forms
 - Train tickets
 - Bank applications
 - Bank deposit slips
 - Weighing items for purchase
 - Ordering items online
 - Having a basic conversation
 - c. Children at Happy Hands School for the Deaf in Binika
 - Time and maths
 - Food
 - Alphabet and names
 - Colours
 - Signs and words
 - Animals
 - Logic
 - Numbers
 - d. Children at Indore
 - Maps
2. Ghana
 - a. Adults at Senior High Technical School For the Deaf, Mampong Akuapem
 - Family
 - Life of Andrew Jackson Foster
 - Storybooks
 - Menstrual cycle
 - Air
 - Negation
 - b. Children at Demonstration School for the Deaf, Mampong Akuapem
 - Pre-test
 - Flash cards
 - Pictures and reading
 - Animals
 - Conversation
 - Christmas
3. Uganda
 - a. Adults at Uganda National Association of the Deaf Vocational Resource Centre
 - Telephone
 - Money
 - Nouns and verbs
 - b. Children at Uganda School for the Deaf
 - Sign language to English
 - Colours
 - Who does what
 - Anna goes to school
 - Sicknesses
 - Clock activity
 - Labelling drawings
 - Identifying verbs

