

# Peer to Peer Deaf Multiliteracies: Towards a Sustainable Approach to Education in Ghana



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## Abstract

In Ghana as many other countries in the global South, many children and young people are marginalized in education. From a pilot project we had learnt from our work in India that an approach based on “real literacies”, in which links are made to authentic literacies in the environment, with teaching and support by deaf peer tutors and deaf research assistants, was fruitful. That pilot also included consultations with the deaf community in Ghana. The project reported upon here, “Peer to peer deaf multiliteracies: research into a sustainable approach to education of Deaf children and young adults in developing countries “ (P2PDML) extended the principles to include young children as well as adults and was reconceptualised upon the richer foundation of multiliteracies, embracing available semiotic repertoires and means of learning. This paper presents three multimodal vignettes which illustrate the dynamic combinations of modes utilized in effective pedagogic activities and gives a flavour of the project’s approaches to peer tutoring and documentation of activities. Finally, in line with the conference theme, “The power and possibilities for the public good when researchers and organizational stakeholders collaborate” we also report on our engagement with significant stakeholders.

## Objectives

The marginalization of deaf children and young adults from access to school systems in the developing world results in individuals and communities being denied quality education; this not only leads to unemployment, underemployment, low income, and a high risk of poverty, but also represents a needless waste of human talent and potential. In Ghana 110, 625 people were identified as Deaf in 2018, yet with less than half of them proficient in

Ghanaian Sign Language (Ghana National Association of the Deaf, 2018). The development of deaf schools and other interventions remains wholly inadequate.

Our current ESRC/DFID funded project is “Peer to peer deaf multiliteracies: research into a sustainable approach to education of Deaf children and young adults in developing countries”(P2PDML); see acknowledgements for further details. We work with groups of children and young adults located just beyond the borders of a major city in Ghana. Our overall ethos is a commitment to “Real Literacies”(Street, 2012) whereby we work to identify and support learners’ already existing authentic interests and literacy practices. Our pilot project, “Literacy Development with deaf communities using sign language, peer tuition, and learner-generated online content: sustainable educational innovation” (see acknowledgements), working in India, identified that this approach led to learner gains beyond the original focus of improvements in their English reading and writing (Gillen, Panda, Papen, & Zeshan, 2016; Zeshan et al., 2016). During the pilot programme we had carried out a participatory feasibility study in Ghana and secured funding for our three-year project there, (as well as India and Uganda), working with young children and adults, broadening our initial concept of “literacies” to “multiliteracies”.

Our research questions in this paper are:

RQ1: How can effective interventions to support multiliteracies be designed that build on deaf people’s existing resources and interests, which develop their capacities and are appropriate to the context?

RQ2: How can the peer to peer deaf multiliteracies approach be adapted to be effective when working with young children?

## Perspectives

Here we explain our “Real Literacies” approach (Gebre, Rogers, Street, & Openjuru, 2009; Street, 2012) and also our developing understanding of multiliteracies, as significant in our work with adults and young children.

The Real Literacies approach departs from the traditional language teaching practices in Ghana. Research on the teaching of English literacy is sparse; a particular challenge for the childhood education sector is the lack of knowledge of effects of substantial changes in educational policy since independence in 1957, see-sawing between emphases on mother tongue and English language as the languages of instruction (Osseo-Asare, 2017). Anecdotal evidence including the experiences of the Ghanaian members of this team suggests that there is often an expectation of formal grammar-based teaching at all levels. In our project we start from a very different point: taking an ethnographic approach to the understanding of everyday literacy practices. We aim to build on students’ existing knowledge and uses of literacy. The peer tutors’ responsibilities are to build on these and as far as possible to shift

the focus from “teaching” to “learning together.” Grammatical topics emerge from what have been known in the project as “Real Life English” examples.

Our pilot project garnered considerable evidence to show that participation indeed led to measurable gains in English literacy skills for learners, but also to increased capacities in multiliteracies including Sign Language skills and metalinguistic competencies (Papen & Tusting, 2019). Multiliteracies has been an influential concept since introduced by the New London Group, (1996); see also Cope & Kalantzis, (2000). Although it is beyond our scope to discuss the transformative nature of its scope and social justice aims, we can mention that we appreciate the call by Jacobs, (2013) for rethinking. She argues that for many the concept became over-synonymous with the use of new technologies, and instead should be conceived more broadly in terms of a multiplicity of modes, discourses and indeed aims of collaborative design processes.

### Evidence and modes of inquiry

Teaching and learning were delivered by a team approach, with each peer tutor (PT), Akraasi Sarpong and Toah Addo teaching supported by either the other peer tutor or the research assistant, Nyarko. The supporting teacher documented the session with the aid of photographs and videos. The lead peer tutor wrote up weekly peer tutor reports and the research assistant (RA), Nyarko, monthly reports. Prior to the start of teaching, the lead and secondary tutors engaged in three months of training on all necessary aspects; what are multiliteracies, how to create micro-case studies, working with our shared online platform Sign Language to English by the Deaf (SLEND) and so on. During the tutoring, the Ghanaian co-investigator, Akanlig-Pare, visited periodically. The whole team discussed the reports, shared on a secure cloud system, periodically through remote synchronous discussions. These have been either in Ghanaian Sign Language and spoken English with interpretation through video conferencing or written English through WhatsApp. In June 2019 co-investigator Gillen travelled to Ghana and conducted 6 hours of observations of lessons and discussed processes and findings with the rest of the team in a face to face meeting. This paper is presented through distillation of several micro case studies.

### Results and discussion

We present our data through three multimodal vignettes (Gillen & Cameron, 2017). We combine simple narratives, texts and images as appropriate.

#### **A. Working with adults: the menstrual cycle**

The topic of the menstrual cycle was suggested by a student who had come across it in a textbook about life management. The other students communicated that they too would like to improve their understandings. The PT found a clear guide to the topic on an American pharmacy site and shared it with the class as a large display. The class, also helped by the RA, drew charts on the whiteboard and discussed the various stages. Discussions were in whole group, pairs or individually (See Figure 1).

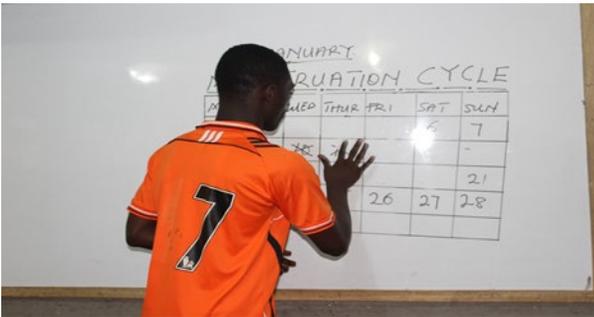


Figure 1 – A student demonstrates his understanding of the menstrual cycle

The PT drew the grammar point of adverbs from this material, since a significant word was “monthly”. This led to some humorous exchanges related to “immediately falling in love.” (See Figure 2).



Figure 2 – The discussion of adverbs takes a playful turn with “immediately”

Finally, the PT created a quiz for individual completion that comprised a demonstration of understanding of adverbs with knowledge about the menstrual cycle. (See Figure 3).

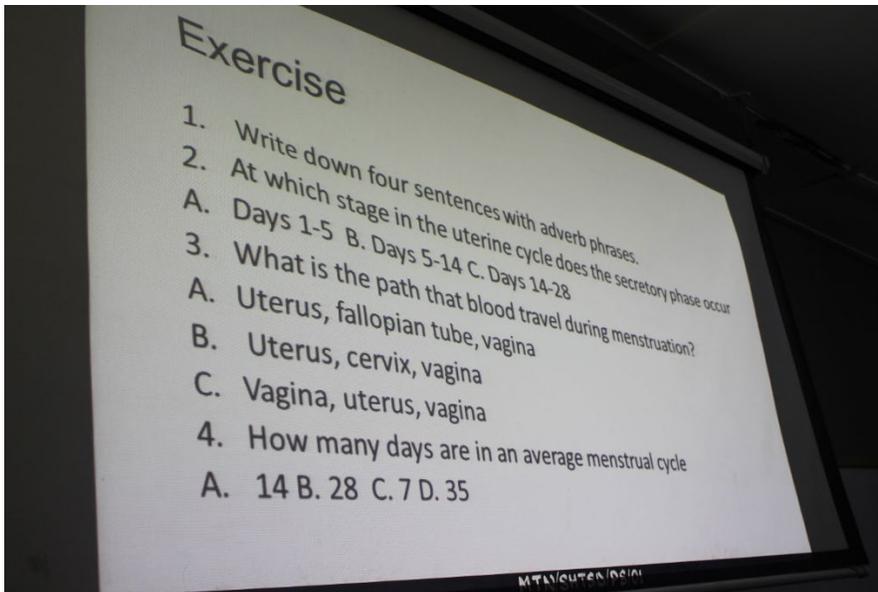


Figure 3 – The quiz on the menstrual cycle

The multimodal approach used in our teaching context departed from traditional methods of learning grammar in Ghana. In Ghana the “real literacies” idea was generally called “real life literacies” emphasizing authenticity. A single such topic could lead in a not immediately predictable way to a grammatical topic, here adverbs. This happened because the in-depth discussion of detailed words had led to the identification of the adverb form as in some way challenging to learners. Here the specific instance the repetition of ‘monthly’ flow of blood. The PT in discussion with the RA derived the grammar topic adverb. That was then engaged with in subsequent lessons, allowing students in small groups and in pairs to engage in in-depth study of the topic. A whole class discussion was often carried out to help students peer tutoring each other. It often turned out to be playful, with students able to share their ideas with minimal interference from the PT and RA. When students had gained an understanding of the grammar topic, an exercise was given to them summing up the whole topic from real life literacies, discussion and grammar. Students were often challenged to explain words used in the glossaries thereby developing their store of vocabulary as well as building their metacognitive skills.

### **B. Working with children: A boy kicks a ball**

The PT began by gaining the children’s attention to multiple copies of a reproduction of a simplistic drawing of a boy kicking a ball. Reduced to a number of fairly simple elements, the picture readily stimulated discussions in Ghanaian sign language for actions, colours as well as nouns. The first author who was present witnessed the vitality of the discussion and enthusiasm of the children to take part. Occasionally a child was asked to write a word on the board. Cross modal links were made between the picture, GSL signs, the writing on the board and finger spelling. Children finished the lesson by completing a slot and fill written

English task that involved a test of memory as the picture was no longer visible. (See Figure 4).

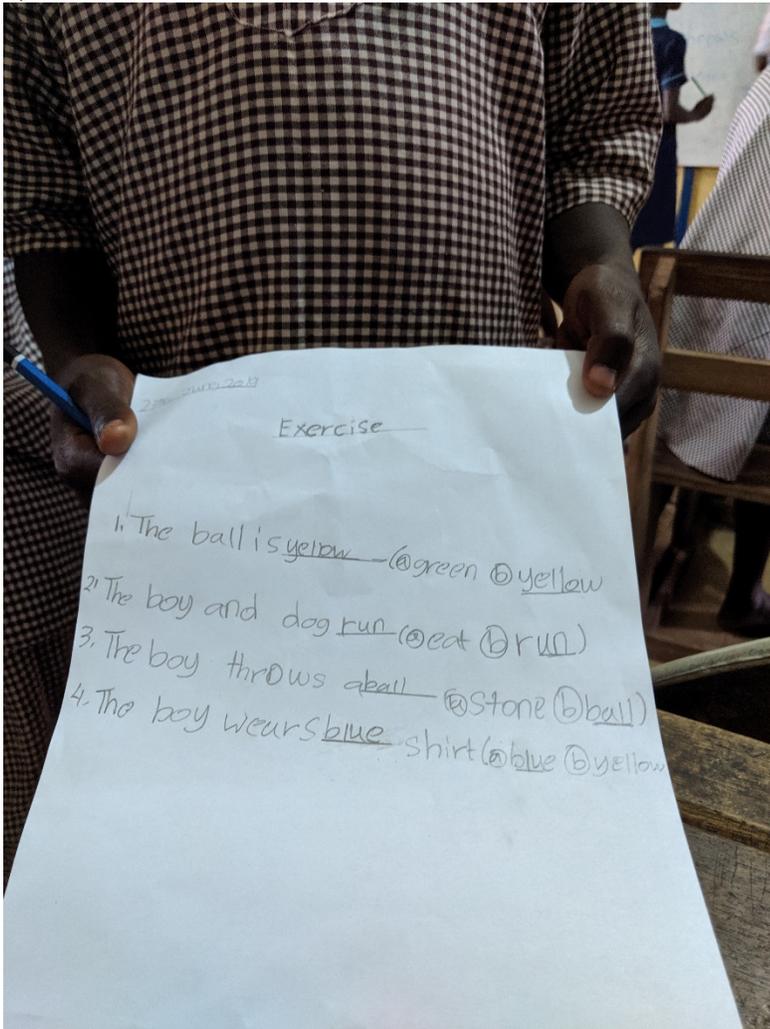


Figure 4 – A child with written sentences

We have found that these children were often stimulated with activities involving simple sentences to buttress their understanding of what they have learnt. Teaching the children often followed a systematic process. They were introduced to the topic, paired to discuss the topic, and given exercises. For every topic, these series of activities were organized so that children were supported both by the PT and other children. An instance was the teaching of adjective and verb. After a series of activities, the children were given exercise as shown in Fig. 4. This activity comprised multiple choice answers (from sentences displayed on a board) where children had to select either an adjective or a verb to complete the sentences.

Observation indicated that about 80% of the children, which is 12 out of 15 children, were able to comprehend and solve the question with ease. They could assist others who found the activity more difficult.

One significant aspect of the children's exercises was that they mostly worked better when provided with multiple choice answers where the demand was essentially limited to selecting

an option to complete a sentence that is then a relatively impressive complete production on their own page. This imparted a sense of achievement and growth of confidence.

### C. Working with children: flashcard activity

The activity was begun by the PT placing the flashcards on the table which the children sat around. The flashcards had English words written on them, which were primarily nouns but also included several verbs. He demonstrated how to use the cards by asking one of the children to hold up a card for him to sign and finger spell the word. He then initiated a peer led approach by asking for a volunteer to run the activity. One of the children then held up cards for each of the other children to sign and finger spell the word from, strengthening the connection between their English word recognition and signing abilities. Each child had the opportunity to sign all the words on the flashcards and they greatly enjoyed the activity (see Figure 5).



Figure 5 – The Peer Tutor engages with the children and flashcards

One of the oldest methods of building children's store of vocabulary, word recognition skills and improving their spelling is the use of flashcards. Flashcards remain one of the most widely used methods in the Ghanaian educational sector particularly at the lower primary level. Teachers often use flashcards to help children recall from memory what they have previously learnt. The PT often used this method to help children recall what they have learnt and to increase their store of vocabulary. This method allows the children to sign and spell

the words they have previously learnt which increase their cognitive competencies. The children reacted to this familiar activity with enthusiasm, particularly at the moments when they were given individual responsibility and rewarded for signing correctly by being given the card. Each of the children wanted to participate and collect more cards, engendering a fun, competitive atmosphere.

## Discussion and conclusions

In response to Research Question 1 we found that a variety of lesson topics connected with the students' interests, sometimes in relation to the vocational education they were engaged in, sometimes to their leisure or general concerns. The Real Literacies approach enabled the Peer Tutor to respond appropriately and in creative ways make use of available resources and limited technologies available.

In response to Research Question 2 the project's general ethos was transferable to working with children. Their interests were captured through a variety of activities and the examples here were experienced as extremely productive and enjoyable by the children. It was important to connect to activities and topics familiar to them; they were less able to generate topics than young adults.

Future publications will include data on pre and post tests of the children and adults, although it is important to emphasise that the project intervention in Ghana was, fortunately, not the only education the participants were experiencing.

## Significance of the study

The major practical significance of the work reported here is that speaks to the efficacy of the approach. According to our qualitative data collection, the deaf children and adults with whom we work are successfully engaged as learners within our pedagogic approach founded on multiliteracies, Real Literacies and as sustainably taught by Deaf teachers. Capacity in the deaf community of Ghana is enhanced through experience of the project whether as learner, peer tutor or research assistant and points to upward trajectories. For example Nyarko, the deaf research assistant, is now enrolled in an MA in TESOL and working part time teaching in Sign Language Studies at the University of Ghana.

In line with the conference theme, "The power and possibilities for the public good when researchers and organizational stakeholders collaborate" we also report on our engagement with significant stakeholders. Akanlig-Pare, the Ghanaian co-investigator, was invited to address a meeting held in June 2019 by the Ghanaian National Association of the Deaf with

the Ghana Education Service Special Education Division, the National Commission of Civic Education, the Federal Disability Management Organisation and others. He discussed the work of the project, presenting evidence as to the increased achievements of learners and the efficacy of the deaf peer tutors supported by the research assistant. Most deaf people in Ghana do not access a useful education so their employability and wellbeing suffers. The meeting concluded that a vital first step is to achieve recognition of Ghanaian Sign Language in Ghana, as has happened with other African countries such as Uganda and Kenya.

Gillen and Papen, UK co-investigators, were invited to participate in a meeting in the British Houses of Parliament with an All Party Parliamentary Group on Global Education and Children with Disabilities in 2019 (The Impact Initiative, 2019). The meeting discussed the necessity of research to be both locally embedded and yet scalable, raising challenges of sustainability. It was agreed that training teachers with disabilities themselves is a vital step towards high quality inclusive education.

Finally, we see the main lesson from our project as not restricted to people considered as with disabilities. Our emphasis on multiliteracies recognizes the unique communicative repertoire of each human being (Kusters, Spotti, Swanwick, & Tapio, 2017). Our approach to pedagogy and criticality fosters the potential human development of everybody involved and can be translated to other communities. We wholeheartedly echo Jacobs, (2013: 272): “Making multiliteracies work involves a reconceptualization of schooling so that it incorporates fun, play, and the recognition that the results cannot and maybe should not be predicted. Doing so will require imagination, play, and willingness to embrace the unknown within teaching as well as in learning.”

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