Impact case study (REF3)

Institution: University of Central Lancashire	
Unit of Assessment: 26 - Modern Languages and Linguistics	
Title of case study: <u>Improving educational attainment and professional development of deaf children and youth in India, Ghana and Uganda through language and literacy education</u>	
Period when the underpinning research was undertaken: 2015 – ongoing	
Details of staff conducting the underpinning research from the submitting unit:	

Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Ulrike Zeshan	Professor	2006 – ongoing
Jenny Webster	Research Associate	2018 – ongoing
Sibaji Panda	Senior Lecturer	2006 – 2016
Daniel Waller	Head of School	2004 – ongoing
Eilidh Rose McEwan	Senior Research Assistant	2017 – 2020

Period when the claimed impact occurred: 2016 – 2020
Is this case study continued from a case study submitted in 2014? N

1. Summary of the impact (indicative maximum 100 words)

This project has improved educational attainment and professional development for deaf sign language users, a marginalised group with insufficient access to education, in India, Ghana and Uganda. With 124 young people aged 16-25, we have facilitated acquisition of reading, writing and 'multiliteracies' skills through sign languages in programmes led by deaf peer tutors. After validating our learner-centred approach, we undertook further work with 79 deaf primary school children. We have trained an international group of young deaf professionals as resource persons, created curricula to qualify deaf people for teaching roles, and engaged with policymakers on introducing deaf-led courses into educational systems.

2. Underpinning research (indicative maximum 500 words)

This work has been funded by the ESRC-FCDO "Raising Learning Outcomes in Education Systems" programme since 2015. Research is carried out with partners in the Global South, and the work has been cascaded from India to Ghana and Uganda, and further to Burundi and Nepal.

In the targeted countries, marginalisation begins in schools, since many have no resources for teaching through sign language, even though this is the only fully accessible language modality for deaf children. Our 'peer-to-peer deaf literacy/multiliteracies' approach has used deaf people's own resources, with learning focussed on real life needs and a peer-guided pedagogy [1]. We examined how we can involve deaf individuals in the design of grassroots approaches to teaching and learning, and we use young people's everyday experiences and existing literacy practices as the basis for their learning [1, 2]. Participants develop 'multiliteracies', that is, a range of multilingual and multimodal capacities, including sign language, reading/writing, and digitally mediated remote communication. Our team has trained and employed deaf research assistants and peer tutors, who act independently in the classroom [3, 6].

Underpinning this research is a commitment towards social justice and the furtherance of human rights, in this case deaf learners' rights to an accessible language. This combines with our 'deaf-led research' approach: deaf people participate actively in all stages of the project, from design, data collection and classroom interventions to analysis, academic publishing and dissemination. In order to bridge gaps between academia, education practitioners and grassroots deaf communities, we have developed techniques of co-creative facilitation with cross-sectoral groups [4].

Interventions for developing language and multiliteracies with deaf learners have been implemented with a total of 124 young adults and 79 primary school children in India, Ghana and Uganda, with further scoping workshops in Nepal and Burundi. Findings from quantitative and qualitative data of the first cohort of young adults in India indicated a positive response to the approach. Interviews with 46 learners highlighted the use of sign language and the role of deaf peer tutors as essential to improving skills in language and

literacy. There was also significant improvement of English literacy across the 43 candidates who took both a pre- and a post-test [3, 6]. Stimulated by such evidence, the research was then extended to further groups of deaf learners, including primary school children in India, Ghana and Uganda. The learning gains in multiliteracies have been particularly impressive among those who benefited from the highest number of learning hours spent with our deaf tutors. Child-friendly skills tests, learner portfolios and observation reports have documented how a holistic approach, where we introduce complete ecosystems of learning, leads to progress not only in reading and writing but also in sign language, logical reasoning, visual arts, and numeracy [6].

The research also investigated factors in existing systems of educational provision and how these may systematically undermine and isolate deaf communities and their sign languages, seeking remedies that will suit the dynamics of local contexts [6]. A concept for deaf professionals in language and literacy education has developed from this angle of the research. Along this, we developed and adapted appropriate assessment tools and metrics. This includes adapting the Common European Framework of Reference for Languages (CEFR) for deaf adults and the 'Language Ladder' for deaf children [3, 6]. Finally, research into international development projects with deaf communities has situated our approach in the wider landscape of this area of work [5].

3. References to the research (indicative maximum of six references)
*Starred publications are peer reviewed; for those marked with # see COVID impact statement

*1. Gillen, J., **Panda, S**., Papen, U. & **Zeshan, U.** (2016). Peer to Peer Deaf Literacy: Working with young deaf people and peer tutors in India. *Language and Language Teaching* 5, 2(10): 1–7. Available at https://azimpremjiuniversity.edu.in/SitePages/pdf/Language-and-Language-Teaching-July-2016.pdf

*2. Ahereza, N., Nyarko, M., Fan, H.R., Gillen, J. & **Zeshan, U.** (2016). SLEND Sign Language to English by the Deaf: literacy development with Deaf communities using sign language, peer tuition, and learner-generated online content. In U.I. Ogbonnaya & S. Simelane-Mnisi (Eds.), *Proceedings of the South Africa International Conference on Educational Technologies: "Empowering the 21st century learner", April 2016, Pretoria.* (pp. 96–106). Pretoria: African Academic Research Forum. Available at https://eprints.lancs.ac.uk/id/eprint/78812/5/SAICET_2016_Proceedings.pdf

#3. Gillen, J., **Zeshan, U., Panda, S.** & Papen, U. (2019). Peer to Peer Multiliteracies: A new concept of accessibility. Paper presented at British Association for Applied Linguistics Conference: Broadening the Horizons of Applied Linguistics, Manchester Metropolitan University, Aug. 2019. Available at https://eprints.lancs.ac.uk/id/eprint/136381/1/BAAL_P2PDML_final_paper_2019.pdf

*4. **Zeshan, U.** (2020) *Serious games in co-creative facilitation: Experiences from cross-sectoral work with deaf communities. Ishara Research Series No. 4.* Lancaster: Ishara Press. Available at https://library.oapen.org/handle/20.500.12657/45769

5. **McEwan, E.** (2020). Signs from the Global South: Development with deaf communities. *E-International Relations.* Available at: https://www.e-ir.info/2020/08/27/signs-from-the-global-south-development-with-deaf-communities/

#6. **Webster, J.** & **Zeshan, U.** (2020). Deaf Literacy and Multiliteracies in countries of the Global South: Reporting on research findings. Preston: University of Central Lancashire. Available at https://islandscentre.wordpress.com/2020/12/30/peer-to-peer-deaf-multiliteracies-project-completed/

COVID impact statement: Several publications have been slowed down due to individual circumstances of the researchers, as responsibilities for others' wellbeing and duty of care took priority: two of the Co-Is in the UK were Heads of School throughout the crisis, and the PI was stranded in India for several months along with deaf trainees in need of repatriation. Two RAs, in India and in Uganda, contracted COVID and recovered. To mitigate the delays,

a precursor paper [3] with the same title and authors has been listed instead of the forthcoming *peer-reviewed chapter in D. Griffiths, K. Pahl, S. Ainsworth, & G. Macrory (eds.), *Multilingualism and multimodality: Working at the intersections* (Bristol: Multilingual Matters). A forthcoming *peer-reviewed volume Webster, J. & Zeshan, U. (eds). *READ WRITE EASY: Deaf-led research, practice and innovation in multiliteracies* (Lancaster: Ishara Press) has four contributions by staff from the submitting unit; in place of this, a research report [6] includes summaries of this research.

4. Details of the impact (indicative maximum 750 words)

This research addresses the issue of 'inclusive and equitable quality education' (Sustainable Development Goal, SDG4) through its focus on deaf learners, who are often left behind with respect to their education, and hence their life chances. SDG10 on reducing inequalities is also highly relevant because this research empowers deaf people to take charge of their own learning and facilitates their participation in society. The roots of this impact go back to our ground-breaking BA in Applied Sign Language Studies, which was delivered with a partner university in New Delhi to deaf students from multiple countries of the Global South. Since 2015, nine of these graduates, and seven further young deaf people, have been translating their skills into new educational opportunities for their deaf peers by participating in our research.

Deaf learners: Learning with the Peer-to-Peer Deaf Literacy/Multiliteracies Model

The essence of our approach is that deaf tutors teach their deaf peers, using sign language as a bridge to other literacy and multiliteracies skills. So far, 124 young deaf adults and 79 deaf primary school children at 12 different institutions have directly benefited from the project by taking part in 'Peer-to-Peer (P2P)' literacy/multiliteracies classes in India, Ghana and Uganda. To document the learner experience, we launched a documentary film online in February 2019, which has since had 935 views [A]. Four further videos about our work were launched in 2020 [B] where learners expressed how they value and use their increased skills and confidence. Alex Nsabyera, P2P student at Uganda National Association of the Deaf, UNAD says: "**I used to have challenges with self-esteem but now I can use my phone to communicate. If I want to ask the price of anything, I know the spelling for "buying" and "selling". So, I just have to type that on my phone, as well as the money, how much balance. (…) This is what I can now type on the phone to communicate with the clients. And when they deliver my products, I am able to pay because now I understand how to communicate on the phone**." Rose Nalukwago, tailoring and P2P student at UNAD states: "**I had never seen any peer tutoring class elsewhere. (…) I have been taught how to use my phone, it's very interesting. I even went to buy myself a phone. During the holidays, I looked for where the MTN center is and bought a SIM card. I actually now know the names of places and which places sell phones.**" Finally a young woman in a P2P group at Delhi Foundation of Deaf Women said: "**I could not sign in front of a camera due to hesitation. The tutor encouraged me to practice signing. I gradually became comfortable in front of the camera. These videos were subsequently used to make SLEND [i.e. online learning platform] content, which were further used by other students across other centres in India (…) The P2P project was a lot of learning for me. Thank you!**"

Moreover, our model has been adapted for use in China under a UK-China collaboration programme funded by the British Council. Sign language-based English literacy teaching has been used at Zhengzhou Institute of Technology, which hosts a college for over 600 deaf students. The project has directly benefited a group of 20 learners. Zhang Peng, a Chinese participant, commented on the deaf learners' perspective after a joint UK-China workshop on English literacy through sign language: "**There are not enough functional resources used in the teaching of English in China, and more resources are needed. The workshop improved their confidence to create materials by recording themselves translating from English to Chinese Sign Language.**" [C]

For deaf primary school children, having an accessible linguistic environment is simply transformative. At one of our partner schools, introducing multiliteracies has led to many

creative outputs. In a self-produced video on the occasion of International Day of Sign Languages 2019, a girl in Class 3, Happy Hands School for the Deaf, Sindurpur village, Odisha summarised her experience in a drama that included her personal story: **"What is the meaning of this word? I didn't know it, and asked the deaf teacher: What is the meaning of F-A-S-T? The teacher explained it to me by signing, so I can understand better. I dream of being happy to develop, and being intelligent."** [J]

Deaf professionals: Career and skills development for project members

Career and skills development for our deaf research assistants and tutors through involvement with our research has been a top priority and has changed their lives. Two deaf team members from India and from the UK are pursuing PhDs linked to this research. In 2016, our deaf research assistant from Ghana (Nyarko) won the prestigious Mandela Washington Fellowship for young African leaders [F]. He then completed an MA in Teaching English as a Second Language and gained employment at the University of Ghana as a sign language teacher. In India, six staff members used our research environment as a springboard to other employment joining NGOs and educational and research institutions. This included the central government's Indian Sign Language Research and Training Centre in New Delhi as well as a sign-bilingual senior secondary school programme for deaf students at the National Rehabilitation University in Lucknow. Other deaf people have subsequently benefited from their skills through their work in these contexts. Moreover, we have encouraged deaf staff to undertake their own projects within our research group, and we have supported them throughout the process of data analysis, academic writing, and the peer review process. Four deaf project members (Pal, Manavalamamuni, Ahereza, Nankinga) have written academic articles for publication for the first time [6].

To broaden this impact further, in 2019/20 we also trained 12 deaf people from Uganda, India, and Nepal for six months in the principles and implementation of our Peer-to-Peer Deaf Multiliteracies work, enabling several of them to become master trainers. Noah Aherezea from Uganda sums up the co-creative nature of the training and the use of creative facilitation tools such as Serious Games: **"All the tools used here helped activate and draw out our own ideas, and this is very important. When I go back to Uganda, I want to have my own group of trainees and just like here, I will only present one part of the ideas and then use these tools to get all my students to contribute their own ideas."** [E] During and after this capacity building programme, held in India, the team created video lectures in Indian, Ugandan and Nepali Sign Language to resource further training.

Policymakers: Implementation of sign language in educational settings

In 2016, the research team produced a policy report which recommended a qualification for deaf sign language users to become "Language and Literacy Trainers" [G]. Our insight was that qualified deaf professionals were needed in deaf education, as well as the systematic introduction of sign language into educational systems. This has led to several initiatives, including the six-month international capacity building programme mentioned above.

In Uganda, our in-country team engaged with policymakers in education including the National Curriculum Development Centre (NCDC), who have been working with a local NGO partner on developing a syllabus and materials for sign language and deaf education. In a letter to Zeshan in July 2019, Kazinda Generous, Curriculum specialist-in-charge Special Needs Education at the NCDC, notes that: **"The partnership between UNAD and the University of Central Lancashire on professionalising the role of (deaf) sign language users in the classroom under "Peer to Peer Deaf Multi-literacies" will support the implementation of the developed materials. We have noted that this research ties in with current efforts in Uganda for the improvement of trained manpower in inclusive education for children with disabilities"**; she added that this research: **"will fill a gap in the education of deaf children and youth in the country."**[H] A multi-partner advisory committee began a series of meetings in November 2020 to work towards establishing a course for training deaf and sign language using professionals in Uganda.

In India, our research has supported the National Institute of Open Schooling (NIOS) to implement Indian Sign Language as a school subject nationally. Zeshan, Panda and Pal are members of the curriculum committee [I]. The curriculum is complete, and our team has created 17 lessons in sign language as well as a textbook in English for the course. A letter from NIOS in May 2020 states: **"The deaf sign language users in your project are a unique human resource, and Indian Sign Language as a school subject is an unprecedented innovation (...) NIOS has about 100 special education centres across India to cater to the needs of learners with special educational needs. In addition, NIOS broadcasts educational programmes in sign language via its own satellite television channel Gyanamrit, as well as distributing content via YouTube. Therefore, the initiative for Indian Sign Language as a school subject will have the potential to reach hundreds of thousands of sign language users in India."** [I] This is the first time that Indian Sign Language is set to become available nationally as a school subject at par with spoken Indian languages.

COVID impact statement: The development and introduction of the course has been delayed by COVID, as New Delhi and adjacent areas were hit particularly hard. The NIOS offices were closed for several months, and two planned visits by the Indian research team to NIOS had to be cancelled because of travel restrictions.

Right from the beginning of this work, there has been a major interest in the concept of 'deaf-led research', as evidenced, for instance, by the nearly 10,000 views of social media posts about a deaf-led research training week we conducted with 20 participants in India in 2016 [D]. The engagement with policymakers is now moving the goalpost further to 'deaf-led professional practice'. This has been an aspiration in deaf communities for decades, and our research has added to the evidence base which is necessary in order to make a strong case for self-determination in education.

5. Sources to corroborate the impact (indicative maximum of 10 references)

A. Documentary film "Literacy from the Grassroots" with access statistics in Feb 2020 - https://islandscentre.wordpress.com/2019/02/18/deaf-literacy-from-the-grassroots-release-of-documentary-film/

B. Video documentations of research in India, Ghana, and Uganda (two for each country with both children and young adults); available at https://islandscentre.wordpress.com/2020/12/07/video-documentations-of-our-deaf-multiliteracies-work-in-india-and-uganda/

C. iSLanDS blog post on deaf literacy work in China at https://islandscentre.wordpress.com/2018/10/02/english-literacy-and-deaf-multiliteracies-workshop-in-china/

D. Social media views of "deaf-led research" posts at https://islandscentre.wordpress.com/2016/10/27/interest-in-deaf-led-research-soars/

E. iSLanDS blog post on Peer to Peer Deaf Multiliteracies training at https://islandscentre.wordpress.com/2020/05/20/day-3-the-international-capacity-building-programme-for-our-peer-to-peer-deaf-multiliteracies-research/

F. Mandela Washington Fellowship for Marco Nyarko https://islandscentre.wordpress.com/2016/06/15/our-ghanaian-research-assistant-wins-mandela-washington-fellowship/

G. Zeshan, U., Bhattacharya, T., Gillen, J., Mathew, S., Papen, U., Panda, S., Randhawa, S., Tusting, K. & Waller, D. (2017) Policy Report on "Peer to Peer Deaf Literacy" (P2PDL). Preston, University of Central Lancashire. Available at https://islandscentre.wordpress.com/2017/11/08/policy-report-peer-to-peer-deaf-literacy-pilot-project/

H. Letter from the National Curriculum Development Centre in Uganda, July 2019

I. Letter from the National Institute of Open Schooling

J. Video created by children at Happy Hands School for the Deaf https://www.youtube.com/watch?v=Vrljc60L39I&feature=youtu.be