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Knowledge Exchange Seminar Series (KESS)

Inclusive Practice through Keyword Signing – Addressing barriers to accessible classrooms

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Inclusive Education is a world-wide phenomenon, which has been inspired by the Universal Declaration of Human Rights. It has at its heart a shared belief in 'education for all' so that all children, including those labelled as having special educational needs and disabilities, are able to have equal access to education with their peers.

Most European countries are signatories to the Convention on Rights of People with Disabilities, which is explicit that 'Parties shall ensure an inclusive education system at all levels ...' (Article 24) (Department of Economic and Social Affairs 2011). The United Nations Children's Fund (UNICEF) position is that children with special educational needs have a right to education that allows them to flourish alongside their peers in mainstream settings (UNICEF 2012).

This international influence has been expressed, in various ways. For example through national policies and statutory guidance (Perry 2015) and 'mainstreaming' initiatives for children with Special Educational Needs and Disabilities, who might previously have excluded from mainstream classrooms. Inclusive education is seen as requiring classroom practices develop to accommodate a diverse range of learners. Consequently teachers across the world have by necessity responded to their nations' inclusive education initiatives (Heung & Grossman 2007).

Inclusive Classroom Teaching

Despite the plethora of policies which exists, the classroom practice of inclusive education remains ill-defined and is implemented in markedly different ways both between and within countries (Rix & Fletcher-Campbell, 2013). A large scale review examined the nature of whole class, subject-based pedagogies with reported empirical outcomes for the academic and/or social inclusion of pupils with special educational needs. A key finding of this research was the importance of social engagement as intrinsic to the pedagogy (Sheehy et al. 2009). This approach prioritizes the use of social interactions as an educational tool. Other research evidence from 'mainstream' education supports this conclusion. For example, where teaching children the 'talk skills' to engage productively with their peers and curriculum issues has significant positive effects on their academic attainments and also their performance on individual cognitive developmental

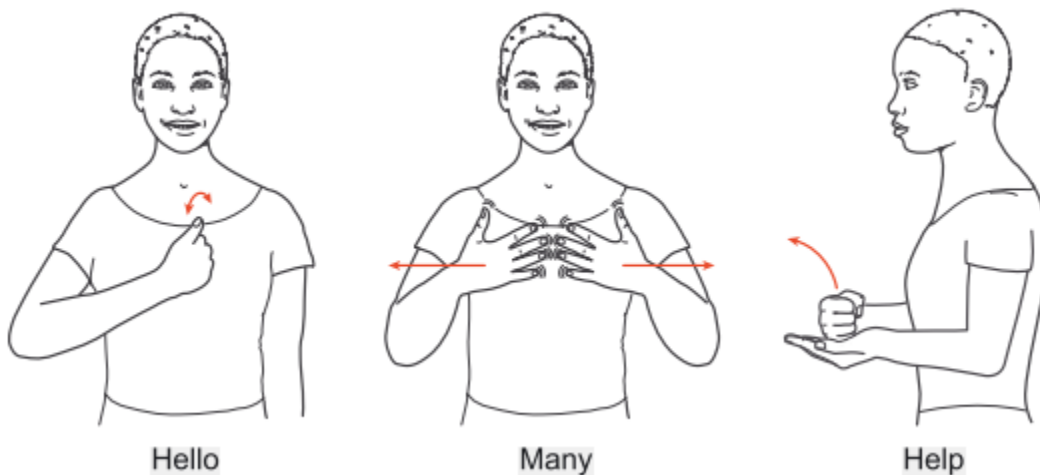
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tests (Howe & Mercer 2007; Littleton & Mercer 2013). However, this way of teaching can benefit children if they can access the social interactions that mediate the classroom's curricular activities and resources. Accessing these classroom interactions is a major issue for children with special educational needs and disabilities who experience difficulties with language and communication (UNESCO 2009). Without this access children remain socially and educationally isolated with schools, experiencing a profound negative impact on their development and learning. Enabling communication must therefore be positioned at the heart of inclusive classroom practice.

A joint project has developed between the Open University and the State University of Surabaya, Indonesia, to explore and inform inclusive classroom practice in Indonesia. Inclusive education presents particular challenges for Indonesia, being the most diverse multi ethnic state and largest archipelagic nation in the world (Direktorat Pembinaan Sekolloah 2008), with a national motto *Bhinneka Tunggal Ika* ("unity in diversity"). Moving towards inclusive schools has created situations where Indonesian teachers are working with pupils with learning disabilities and physical impairments who recently would have been excluded from formal education. A central issue for these schools concerns how to develop inclusive classroom pedagogies (Sunardi et al. 2011). The joint project's first priority was to tackle the issue of enabling communication. This led to the creation of a keyword signing approach known as *Signalong Indonesia*.

Keyword Signing and Signalong Indonesia

A Keyword Signing approach typically takes manual signs from the language of a country's Deaf community. For instance, in the UK signs taken from British Sign Language have been used as the basis for the Signalong vocabulary (see below) and the Makaton vocabulary used in Northern Ireland.



Three Signalong signs (Source: Signalong UK, 2015)

Unlike the signed language of a Deaf community, which has its own grammatical structure and form, keyword signing follows the order of speech, and signs accompany only the key word(s) in each sentence. Therefore, the approach is that of using sign-supported communication, rather than a sign language.

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Research into the use of keyword signing (KWS) has identified several positive features and outcomes.

- KWS are taught, learned, taught and understood, relatively easily (Meuris et al. 2014; Bryen D.N. et al. 1988; Sigafoos & Drasgow 2001).
- They are 'free', require no technologies, and can be used within everyday interactions (Mirenda 2003; Clibbens 2001).
- Children without SEND typically enjoy learning and using KWS, making it beneficial for inclusive schools (Mandel & Livingston 1993; Mistry & Barnes 2012; Sheehy & Duffy 2009).
- KWS improves the language and communication development of children, including those with severe learning difficulties and those without spoken language (Doherty-Sneddon 2008; Dunst & Hamby 2011; Snell et al. 2010; Tan et al. 2014; Rudd et al. 2007).
- KWS can make a child's communication easier for others to understand (Meuris et al. 2014).
- The positive effects of KWS are greater than the outcomes from using either a 'signs only' or a purely oral approach (Schlosser and Sigafoos 2006).

A keyword signing approach for use in inclusive Indonesian classrooms was developed through a series of workshop and pilot studies with teachers from across Indonesia. It is known as *Signalong Indonesia* and draws on the Signalong UK model of teaching, utilizing signs from Indonesian and iconic BSL signs. It was launched in 2015 by the Director of Special Education and Special Services (PKLK).

The Inclusive Indonesian Classrooms projects carries out ongoing research into the use of Signalong Indonesia. The project has identified significant barriers to the use Signalong Indonesia, and hence to inclusive classrooms. These include the following two issues, which are also important within the United Kingdom.

1. *Teachers' beliefs concerning the use of KWS within their schools enables or prevents its successful use in inclusive, and also special, classrooms.*

Even where schools are committed to the use of KWS, and where teachers are able to use KWS, children do not have equal access to KWS in their classroom experiences. Teachers' differing beliefs about who KWS signing is suitable for and the purpose of KWS, shape who they use it with. For example some teachers will see KWS as a whole class strategy, and sign to all members of the class. Some teachers may use it only with children who are unable to speak, others might not do so because they believe that KWS will hold back children's spoken language development.

Exploring this issue has suggested that these important differences in practice and beliefs about KWS arise because of differences in underpinning personal epistemological beliefs i.e. beliefs about how knowledge is created and the relationship between language and development. It is these often unvoiced beliefs that shape what goes on in classrooms, rather than of knowledge of inclusion and KWS alone. For example in our research, teachers who held particular epistemological beliefs were significantly more likely to also hold positive beliefs about inclusive education and the use of KWS for all learners. In particular, teachers with a perspective which sees knowledge as created, primarily, through social and collaborative activities, as opposed to beliefs which sees teaching as a non- problematic [direct] transfer of knowledge and considers learning as the absorption of this process.

2. *The Stigmatization of differences and the status of signing.*

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There is a risk that learners can be denied access to a vital educational experience because of the stigma given to signing in wider society. Our research has suggested that 'looking different' through signing is seen as a bad thing where teachers feel that disability is stigmatised in society, so that signing acts as a visible marker of a stigmatised difference. Teachers, who may be reluctant to use KWS, commonly state that whilst they themselves would not stigmatize children, that others are likely to do so. In Indonesia this stigmatization may extend to the teacher themselves. Even though KWS is distinct from a signed language, a contributing factor to this stigmatisation is the visibility and status of the Deaf communities signed language in society.

The challenges and opportunities for policy makers with an inclusive agenda

Teachers' epistemological beliefs include "assumptions, attitudes, and beliefs about the nature of ability, and beliefs about knowledge, knowing and how knowing proceeds". These beliefs need to be considered as a key part of developing inclusive teaching. Although acknowledged as important, this consideration rarely occurs (Schwartz & Jordan 2011). Our Signalong Indonesia research suggests that there is a predictive relationship between teachers' epistemological beliefs, their support of inclusive education and the way in which they use KWS with children.

However, one cannot impose beliefs onto teachers and so there are ethical issues concerning how advocates of inclusion might attempt to change how teachers think about, possibly unvoiced epistemological issues. One way forward is to allow novice teachers' structured opportunities to reflect on their practice. This approach has been developed successfully in the Inclusive Practice project in Scotland (Florian & Rouse 2009), and this type of approach is likely to have a positive 'knock-on' effect for supporting KWS in inclusive classrooms.

Post qualification training in KWS signing should also consider the 'epistemological issue'. This may be more difficult for policy makers to influence. This type of training is usually provided by independent charities and organisations, and the structure of such training may not allow time for reflection and development of underpinning beliefs. Making KWS training accessible for professionals outside of the education service, will help give some children a voice within in the criminal justice and safeguarding system (Bunting et al. 2015) and also impact upon addressing the mental health needs of people with learning difficulties (Devine & Taggart 2008).

Policy makers could give stronger support to the presence of keyword signing in the media, and also within the materials authorities produces for the public. Based on teachers' comments, the use of keyword signing in websites concerned with inclusive education issues would be likely to have a positive impact on the perceived status of KWS.

Measuring success.

If an educational system seeks to be inclusive, and wishes to use KWS, then the visibility of KWS in the everyday life of schools can act as a robust, simple, indicator of the success of this endeavour.

References.

- Bryen D.N., Goldman, A.S. & Quinlisk-Gill, S., 1988. Sign language with students with severe/profound retardation: How effective is it? *Education and training in Mental Retard.*, 23, pp.129–137.
- Bunting, A.L. et al., 2015. Good practice in achieving best evidence interviews with child witnesses in Northern Ireland -Criminal Justice Perspectives. , (December).
- Clibbens, J., 2001. Signing and lexical development in children with Down syndrome. *Down's Syndrome. Down's Syndrome: Research and*

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Practice, 7, pp.101–105.

Department of Economic and Social Affairs, 2011. No Title. Available at:

<http://www.un.org/en/development/desa/news/social/disability-ratification.html>.

Devine, M. & Taggart, L., 2008. Addressing the mental health needs of people with learning disabilities. *Nursing Standard*, 22(45), pp.40–48.

Direktorat Pembinaan Sekolloah, 2008. *Profil Pendidikan Inklusif di Indonesia | Inclusive Education Profile in Indonesia 1*,

Doherty-Sneddon, G., 2008. The great baby signing debate. *The Psychologist*, 21(6), pp.300–304.

Dunst, C.J. & Hamby, D.W., 2011. Influences of Sign and Oral Language Production of Young Children with Disabilities. *CELL Reviews*, 4(4), pp.1–20.

Florian, L. & Rouse, M., 2009. The inclusive practice project in Scotland: Teacher education for inclusive education. *Teaching and Teacher Education*, 25(4), pp.594–601. Available at: <http://linkinghub.elsevier.com/retrieve/pii/S0742051X09000353>.

Heung, V. & Grossman, D., 2007. Inclusive Education as a Strategy for Achieving Education for All: Perspectives from Three Asian Societies. *International Perspectives on Education and Society*, 8(6), pp.155–180.

Howe, C. & Mercer, N., 2007. Children's social development, peer interaction and classroom learning. *Primary Review Research Survey*.

Littleton, K. & Mercer, N., 2013. Educational dialogues. In K. Hall et al., eds. *British Journal of Educational Technology*. Oxford: Wiley Blackwell (In Press). Available at: <http://oro.open.ac.uk/31351/>.

Mandel, L.A. & Livingston, P., 1993. The effect of signing key words for demonstrating work instructions to students with learning. *Journal of Rehabilitation*, 59(2), pp.43–48.

Meuris, K., Maes, B. & Zink, I., 2014. Evaluation of language and communication skills in adult key word signing users with intellectual disability: Advantages of a narrative task. *Research in Developmental Disabilities*, 35(10), pp.2585–2601. Available at: <http://dx.doi.org/10.1016/j.ridd.2014.06.020>.

Miranda, P., 2003. Toward Functional Augmentative and Alternative Communication for Students With Autism: Manual Signs, Graphic Symbols, and Voice Output Communication Aids. *Language, speech, and hearing services in schools*, 34(3), pp.203–216.

Mistry, M. & Barnes, D., 2012. The use of Makaton for supporting talk, through play, for pupils who have English as an Additional Language (EAL) in the Foundation Stage. *Education 3-13*, (August 2015), pp.1–14.

Perry, C., 2015. SEN legislation and policy in Northern Ireland. *Northern Ireland Assembly: Research and Information Service Research Paper*, p.NIAR 178–15. Available at: <http://www.niassembly.gov.uk/globalassets/documents/raise/publications/2015/education/5715.pdf>.

Rix, J., Sheehy, K. & Fletcher-Campbell, F., 2013. *Continuum of Education Provision for Children with Special Educational Needs: Review of International Policies and Practices*, Available at: <http://oro.open.ac.uk/35012/> [Accessed February 21, 2014].

Rudd, H., Grove, N. & Pring, T., 2007. Teaching productive sign modifications to children with intellectual disabilities. *Augmentative and alternative communication*, 23(2), pp.154–63. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/17487628> [Accessed October 27, 2014].

Schlosser, R.W. & Sigafoos, J., 2006. Augmentative and alternative communication interventions for persons with developmental disabilities: Narrative review of comparative single-subject experimental studies. *Research in Developmental Disabilities*, 27(1), pp.1–29.

Schwartz, E. & Jordan, A., 2011. Teachers epistemological beliefs and practices with students with disabilities and at-risk in Inclusive classrooms. Implications for teacher development. In J. Brownlee, G. Schraw, & D. Berthelsen, eds. *Personal Epistemology and Teacher Education*. Abingdon: Routledge, pp. 210–226.

Sheehy, K. et al., 2009. *A systematic review of whole class, subject-based pedagogies with reported outcomes for the academic and social inclusion of pupils with special educational needs*, London. Available at: <http://oro.open.ac.uk/10735/>.

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- Sheehy, K. & Duffy, H., 2009. Attitudes to makaton in the ages of integration and inclusion. *International Journal of Special Education*, 24(2). Available at: http://oro.open.ac.uk/19897/1/SheehyDuffy_Makaton_112009_No_2.pdf
- Sigafoos, J. & Drasgow, E., 2001. Conditional use of aided and unaided AAC: A review and clinical case demonstration. *Focus on Autism and Other Focus on Autism and Other Developmental Disabilities*, 16, pp.152–161.
- Snell, M.E. et al., 2010. Twenty years of communication intervention research with individuals who have severe intellectual and developmental disabilities. *American journal on intellectual and developmental disabilities*, 115(5), pp.364–80. Available at: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=3035323&tool=pmcentrez&rendertype=abstract> [Accessed March 7, 2013].
- Sunardi, S. et al., 2011. The Implementation of Inclusive Education for Students with Special Needs in Indonesia. *Excellence in Higher Education*, 2(1), pp.1–10. Available at: <http://ehe.pitt.edu/ojs/index.php/ehe/article/view/27> [Accessed March 7, 2013].
- Tan, X. et al., 2014. Acquisition and generalization of key word signing by three children with autism. *Developmental Neurorehabilitation*, 17(2), pp.125–136.
- UNESCO, 2009. *Towards Inclusive Education for Children with Disabilities : A Guideline Towards Inclusive Education for Children with Disabilities : A Guideline*, Bangkok.
- UNICEF, 2012. *The Right of Children with Disabilities to Education: A Rights-Based Approach to Inclusive Education*, Available at: <http://www.inclusive-education.org/publications/right-children-disabilities-education-rights-based-approach-inclusive-education>.

