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Developing Signalong Indonesia: issues of happiness and pedagogy, training and stigmatisation

Budiyanto^a, Kieron Sheehy^b, Helen Kaye^c and Khofidotur Rofiah^a

^aDepartment of Education, State University of Surabaya, Surabaya, Indonesia; ^bFaculty of Education and Language Studies, The Open University, Milton Keynes, UK; ^cFaculty of Social Sciences, The Open University, Milton Keynes, UK

ABSTRACT

Signalong Indonesia (SI), a key word signing approach, was created to support the development of Indonesian inclusive schools. A mixed methods approach collected data about teacher's beliefs and experiences regarding SI from the first two schools to pilot it. Thirty-two teachers completed questionnaires, followed by interviews with nine teachers. Three themes emerged: understanding the nature of SI, the stigmatisation of signers and its reporting by teachers, and the nature of happiness in inclusive pedagogy. The latter reveals, for the first time, the importance of *Suka* as a culturally mediated intrinsic part of Indonesian inclusive pedagogy. The findings suggest recommendations about SI materials and training, and indicate a new research area regarding inclusive pedagogies within different cultures.

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Introduction

As part of its commitment to the world-wide Education for All initiative, the Indonesian government aims to give all children a minimum of nine years of education (Ramos-Mattoussi and Milligan 2013). This includes children who previously might have been excluded or segregated (Suwaryani 2008), most notably pupils with severe learning disabilities (Komardjaja 2005). Consequently, there is a legal requirement for each school district to have at least one inclusive primary and one inclusive secondary school (Sunardi et al. 2011). A central issue for these schools concerns how to develop inclusive classroom pedagogy (Sunardi et al. 2011). Whilst the notion of inclusive education is operationalised differently at policy level in different countries (Ainscow 2012), a range of research indicates some characteristics of inclusive classroom pedagogy. At general level such a pedagogy aims to

... extend what is ordinarily available in the community of the classroom as a way of reducing the need to mark some learners as different. [an approach] providing rich learning opportunities that are sufficiently made available for everyone, so that all learners are able to participate in classroom life. (Florian and Black-Hawkins 2011, 826)

Outcome-based reviews suggest that a key characteristic of inclusive teaching, producing positive social and educational outcomes for learners, is the use of a pedagogy that is

CONTACT Kieron Sheehy ✉ kieron.sheehy@open.ac.uk 📠 Faculty of Education and Language Studies, The Open University, Stuart Hall Building, Walton Hall, Milton Keynes MK7 6AA, UK

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essentially social-constructivist in nature (Ferguson-Patrick 2012). There is evidence to suggest that this perspective concurs with the implicit epistemological beliefs of Indonesian teachers within inclusive schools (Sheehy and BudiYanto 2015). However, this way of teaching can only exist where children are able to access the social interactions that mediate the classroom's curricular activities and resources. Accessing these classroom interactions is a major issue for children with severe and profound learning difficulties (UNESCO 2009) and their peers and teachers. If the classroom's communicative resources are not accessible then these children will remain isolated socially and educationally, experiencing a form of locational integration (Avramidis and Norwich 2002). Enabling communication must therefore be positioned at the heart of inclusive classroom practice. One approach which has the potential to facilitate an inclusive communicative classroom environment is key word signing (KWS).

Key word signing

KWS uses manual signs to highlight the key words in a spoken sentence and, unlike the signed languages of Deaf communities, follows the word order of speech. KWS approaches have been used to support children with severe learning difficulties in several countries, often with manual signs adopted from those of the respective country's Deaf community. For example, using Irish (Lámh 2008), Flemish (Vandereet et al. 2011) and British (The Makaton Charity 2012) sign languages.

KWS are learned relatively easily (Meuris, Maes, and Zink 2014) and several factors contribute to their accessibility. Signs can be physically modelled and shaped for children (Bryen, Goldman, and Quinlisk-Gill 1988) and their multimodality enhances their comprehension (Sigafoos and Drasgow 2001). Their use requires no technologies (Mirenda 2003) and so KWS can easily be part of everyday interactions (Clibbens 2001). Within inclusive classrooms there will be children who do not themselves 'need' KWS, but use it to communicate with their peers. These children typically enjoy learning KWS and are motivated to use it (Mandel and Livingston 1993; Mistry and Barnes 2012). KWS can potentially be used by all pupils and so some teachers have seen it as a tool to support inclusive classrooms (Sheehy and Duffy 2009). There is extensive evidence that KWS improves the communication and language development of children with severe learning difficulties, including those without spoken language (Doherty-Sneddon 2008; Snell et al. 2010; Dunst and Hamby 2011; Tan et al. 2014). It can also enhance children's expressive language development (Rudd, Grove, and Pring 2007), stimulate speech development (Millar, Light, and Schlosser 2006; Schlosser and Wendt 2008) and make communication easier for others to understand (Meuris, Maes, and Zink 2014). There is evidence to suggest that 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).

The development of Signalong Indonesia

A joint project between the State University of Surabaya, Indonesia and The Open University, United Kingdom, explored the development of KWS for inclusive classrooms. As part of this, teacher workshops and seminars in East Java examined different KWS approaches and chose Signalong UK (Signalong Group 2012) as a model. Signalong UK

has several features which were felt to be beneficial in the Indonesian context. It uses a 'one sign: one concept' approach, where each concept has a discrete sign. (By contrast some KWS approaches use the same sign to indicate more than one concept e.g. for 'bed' and/or 'sleep'). This makes it more accessible for children with severe learning difficulties who experience problems with concept discrimination and generalisation. Another distinctive feature is the use of specific describable handshapes for each sign. This ensures the fidelity of signs as they are passed between people, including via text message or telephone, an important issue in a geographically and culturally diverse nation. There were several options for choosing SI's 'donor' signs. Although research studies of sign languages in Indonesia are few (Isma 2012) and the number of sign languages is unknown (Palfreyman 2011), many sign languages and dialects of sign language exist alongside the nations' approximately 726 spoken languages (Lewis, Simons, and Fennig 2015). There are three well-known sign languages. Kata Kolok is a unique sign language that is used across the Deaf and hearing community in North Bali. It bears little linguistic relation to spoken Balinese or Indonesian languages (Kortschak and Sitanggang 2010). More widespread is Bahasa Isyarat Indonesia (BISINDO), argued by some as being the natural language of the Indonesian Deaf community (Effendi 2014). In contrast is Sistem Isyarat Bahasa Indonesia (SIBI). This mirrors spoken Bahasa Indonesian language and incorporates concept signs and grammatical markers (e.g. suffixes) and a finger alphabet (Jan, Branson, and Miller 2004). SIBI is promoted by the Department of Education as the language for teaching Deaf children within special schools. There is an ongoing issue for Kata Kolok and BISINDO users regarding the use of SIBI (Kortschak and Sitanggang 2010) and the linguistic rights of the Deaf (Branson and Miller 1998). As Signalong Indonesia (SI) would be for use in inclusive classrooms, the intention was that all members of the classroom should be able to access it, its use within classes should be as unproblematic as possible, and that it could be used across different provinces. Using an additional natural language such as BISINDO or Kata Kolok could make communication less accessible for teachers and pupils speaking Bahasa Indonesian. A further issue is that BISINDO is 'unstandardised' (Lewis, Simons, and Fennig 2015) and changing (Isma 2012), with different languages being used in different regions (Isma 2012). Conversely, SIBI's standardised system of complex grammatical markers requires quick signing, manual dexterity and a high level of language comprehension. This would exclude many children with learning disabilities (Loncke 2014) and potentially some Deaf pupils (Effendi 2014). Therefore, the initial (pilot) SI vocabulary drew on standardised Signalong UK and (simple) SIBI signs to support key words used in spoken Bahasa Indonesian within classrooms. The SI materials were developed and introduced in initial teacher workshops.

Teachers' beliefs concerning the use of KWS within their schools enables or prevents its successful use (Sheehy and Budiyo 2014). This paper researches this area, using questionnaires and interviews within two inclusive schools in East Java, which volunteered to act as the first 'laboratory schools' for SI. Both had at least one teacher who had taken part in the teacher workshops, and used SI in at least one classroom. School 1 has both Sekolah Dasar (Primary School) and Sekolah Menengah Pertama (Middle School) sections, with 40% of pupils being identified as having educational needs. School 2 is a Sekolah Menengah Pertama, where approximately 3% of pupils have special educational needs. This wide range fits within the variability identified within inclusive Indonesian schools, which indicates an average of 12% of pupils of pupils having special educational needs (Sunardi et al.

2011). The vast majority of such pupils (85%) have intellectual disabilities (Sunardi et al. 2011), and this is the case for the two pilot schools.

The aim was to gain insights into the beliefs and experiences concerning SI that were present or emerging in these schools, and to use these to inform the further development and implementation strategy of SI. This research therefore explored, for the first time, the beliefs and experiences of teachers within the first two schools where SI was being piloted.

Method

A mixed methods approach was adopted because it offers unique insights into the challenges and facilitation of implementing of new educational initiatives (Klingner and Boardman 2011), giving a deeper understanding of educational activities in context than available through other approaches (Klingner and Boardman 2011; Onwuegbuzie 2012). The research used questionnaires, followed by semi-structured interviews grounded in a common context (Harris and Brown 2010). Semi-structured interviews explored issues arising from the questionnaires in depth, rather than merely illustrating them, with data analysis occurring sequentially followed by an integrative interpretation (Lopez-Fernandez and Molina-Azorin 2011).

The research followed the ethical guidance of British Psychological Society (British Psychological Society 2014), which included gaining a signed informed consent from interviewees, and was approved by the relevant university ethics committees. Research Data were managed in accordance with the Data Protection Act (Alcser et al. 2011).

The questionnaire was exploratory in nature and contained a mixture of 1 closed and open questions (See Appendix 1). However, in keeping with ethical principles (British Psychological Society 2015) only questions which could be justified were asked. Therefore, in the context of understanding beliefs and experiences of KWS age, gender and years of teaching were not examined (see Sheehy and Budiyanto 2015 for a discussion of this issue). Initial questions asked the teachers their occupation (e.g. class teacher, special needs teacher) and if they had attended any SI training workshops and/or seen the SI manual (a dictionary of signs). Indonesian teachers can hold differing beliefs about which children should sign (Sheehy and Budiyanto 2014), hence Questions 3 and 4 concerned beliefs about who might benefit from SI. If the participant used signing in their own class they were asked to describe if and how it had changed their classroom practice (Question 6). Conversely, if the teacher did not use signing they were asked about this (Question 9). The stigmatising of signing can be a barrier to its use (Ladd and Lane 2013) and so Questions 11 and 12 considered this. Each school had copies of the pilot SI vocabulary manual within their staffrooms, and Question 7 asked if teachers felt any additional signs were required. New technologies have been used to support sign use (Mcknight and Davies 2012), and Questions 14 and 15 related to teachers' ability and willingness to use this support. Research in inclusive Indonesian schools suggested that particular teaching approaches were associated with inclusive classrooms (Sheehy and Budiyanto 2015), informing Question 16.

Finally, teachers were asked to share anything they felt relevant regarding the use of signing in their school or their feelings about the use of signing, and anything that

should be covered in future any training workshops. The questionnaire was back translated between English and Bahasa Indonesian and revised for clarity. The final questionnaire was presented in Bahasa Indonesian.

Questionnaires, and information and consent forms, were left in the staff rooms of the two inclusive schools in different cities in East Java, along with a collection box, which was collected after one week. In total 32 questionnaires were returned from 57 teachers, giving a return rate of approximately 56%. The interviews were conducted in Indonesian and English. A translator was present throughout and provided clarification when required and the interviews were recorded and later transcribed for analysis.

Interview participants

Nine teachers, three men and six women, from two inclusive schools (2:3 and 1:3 respectively) were interviewed. This included one headteacher (school 2) and one deputy headteacher (school 1). Their ages ranged from 25 to 55 years.

Interview method

The interview methodology was qualitative in nature and the data were analysed using a thematic analysis (Braun and Clarke 2006; McGillicuddy and O'Donnell 2014). Themes were derived from interview transcripts through inferring interpretations of the data (inductive analysis), and also informed by the literature review underpinning the questionnaire (deductive analysis) (Fereday and Muir-Cochrane 2006). Potential themes were reviewed with reference to both their distinctiveness and their representation of the data as a whole. The interviews began with two general questions:

How is SI used in your school?

What do you feel about the use of SI within your school?

The discussion was informal and issues by the teachers were explored in line with a non-directive interview technique (Burman 2001). However, prompts were used, if necessary, to consider key issues which had emerged from the initial questionnaire (indicated below). Interviews lasted between 20 and 30 minutes.

Findings

Teachers' experiences of Signalong Indonesia

All questionnaire respondents had seen the SI materials, 29 described themselves as inclusive class teachers and three as 'therapist in inclusive class'. Two teachers from each school had attended SI training workshops. Three teachers indicated that they currently used SI in their class. This included two of the teachers who had attended a training workshop and used it, respectively, with their entire class or with children who could not speak. The teacher who had not attended a training workshop used SI for children in their class who were unable to speak. However, although all these participants had seen the SI materials, the nature of KWS was not being transmitted by them.

All respondents felt that there were children in their school, who could benefit from SI. The open question responses indicated that this was because it was seen as accessible and

able to enhance classroom communication. The majority (20) saw it as easy to learn, either because it was 'fun' (10) or simple, being part of everyday class activities' (7). Seven respondents indicated that SI would make classroom communication easier and clearer for the children. All but one owned a smart phone and all of this group wished to use smart phones in class as part of sign-related activities. There were two types of reasons given for why participants did *not* use signing within their own classes. The first related to teachers who would wish to use it, but were prevented by a lack of training.

I don't have the knowledge..very difficult if I don't read more about how to use it.

The big problem is that I haven't [attended] a training workshop. The training workshop is a very valuable activity that can support using signalong in the future.

we need to be trained in its use ... [at a] workshop

However, the majority of participants gave another reason, that it was not relevant for the children in their particular classes. Whilst all agreed that some children might benefit within their *school*, a clear picture emerged about why they themselves would not use SI and, by implication, the children for whom they believed SI would be suitable.

we use verbal communication in our class and no sign language is needed to communicate

[Because] our students can say what they think and what they want easily

because we can still use verbal communication

Twenty-six participants expressed this type of belief, including one who had attended a training workshop. The picture that emerged was that teachers felt that because their children had at least some spoken language skills then SI was not needed. This suggests that the purpose of SI is being misunderstood. It was being perceived by teachers, based on their observation and knowledge of the SI materials, as a remedial approach for non-verbal children or children with communication difficulties. The concept that this is a communication approach for an inclusive school, through which for example, *all* pupils and teachers might communicate with each other was not evident.

There was also evidence that keyword signing was seen by some as a signed *language*. Twenty-four questionnaire responses sought advice about signing full sentences and/or the use of conjunctions and adjectives.

yes, we are confused how to make a sentence and use conjunctions

How to make a sentences and use conjunction, adjectives etc?

How do we make sentences, combining all the Signalong signs?

This question was asked by two of four teachers who had attended initial training workshops (but not the teachers using SI in their classes). This suggested that the nature of keyword signing was not being picked up by all workshop participants or from the SI materials within the school. Similarly, in the interviews, several teachers felt SI was a 'language', and that all spoken elements should be signed, that is, as a direct translation of Bahasa Indonesia in fashion synonymous with SIBI. Another belief, expressed in several interviews was that SI was a 'universal language'. This arose in discussions of its simplicity and ease of understanding and implied beliefs that SI was transparent to all because it used 'obvious' iconic gestures. This

belief has been noted in teachers unfamiliar with KWS (Sheehy and Budiyo 2014), but in this research this belief existed in two schools where KWS (SI) is being used, albeit in relatively few classrooms, where all teachers have seen the SI vocabulary materials.

These findings have implications for the development of SI. It is positive that the materials were seen by all the teachers. However, their current format consisting of an introductory text and then a dictionary of isolated signs, appears to miss the opportunity to sufficiently convey the nature and purpose of SI. A straightforward way to address this might be to give more illustrated examples within the dictionary of SI supporting spoken communication in particular contexts, and a short series of FAQs derived from issues revealed in this research. This would benefit the 'casual' reader whose background knowledge of KWS is shaped by media debates concerning BISINDO and SIBI.

The development of SI involved teachers from different schools across Indonesia. This was beneficial in terms of gaining feedback and expertise from a diverse audience on vocabulary and contexts. These individual teachers then returned to their schools, along with SI vocabulary materials, after attending workshops. Unintentionally this approach could be seen as constructing a specialist 'remedial' approach (Clough and Barton 1995) for the subsequent implementation of SI within schools. This research suggests that there is a risk of the 'signing teacher' being assigned to distinct 'inclusive classes', with SI not being transferred to other classes or across school activities. Furthermore, the 'signing teachers' may hold different views about which children within their classes should sign (e.g. all the class or only a particular 'type' of child), consequently limiting children's access to SI. If the potential of SI to support inclusive education is to be realised then training and support should be focused towards this end. The model of training needs to be different to the 'withdraw and return' model used in the development of the approach itself. This highlights a priority for the project in considering alternative models of initial and in-service training (Florian and Rouse 2009; Bradshaw, Twining, and Walsh 2012) and issues of attitude change within diverse cultures and classrooms (UNESCO 2014).

Stigmatisation: Perhaps here, definitely elsewhere

Although only one questionnaire participant felt that society stigmatised signers, 31% indicated that they had colleagues in their school who saw signing as stigmatising children. This belief was expressed approximately equally in each of the two schools. In the interviews teachers produced contrasting opinions regarding the issue of stigmatisation in their locality.

there is a lot of prejudice against children with special needs who sign..people are always telling them off rather than giving them support. [School 2, Teacher 2]

To my knowledge, students with special needs are warmly welcomed in this area.

[School 2, Teacher 1]

In public, people generally accept their condition. [School 1, Teacher 1]

One teacher described how colleagues had tried to dissuade him from working with children with special educational needs because it would damage his status as a professional. Signing by association was, he felt, stigmatised by association with this group of children. In both schools nearly all the pupils with special educational needs would be identified as

having intellectual disabilities. The group has been identified as being ‘the most stigmatized’ (Komardjaja 2005, 117) in Indonesia society. This is likely to be a significant factor in the ‘stigmatisation by association’ that this teacher suggests.

There was a broader agreement amongst interviewees that stigmatisation existed ‘elsewhere’ in the country.

in certain areas, maybe in remote areas, some people are still ashamed of having children with special needs. Parents keep their children at home. They feel ashamed. They don’t want to get the children to know their neighbors. But, it does not happen here. It depends on the culture or family background. [School 2, Teacher 3]

Interviewees consistently suggested that children’s ‘difference’ (through signing) was not an issue within classes and that therefore relationships between peers were supportive.

They never hurt each other, they’re never bullying, they never judge their friends and most of them are helping. For example there is a student who can read something and want to buy something in the canteen and the other student will help them to write what they want. [School 2, Teacher 1]

able-bodied peers willingly help students with disabilities. Students with special needs make friends with regular students. [School 1, Teacher 3]

Able-bodied peers never insult students with special needs. They don’t bully such students. [School 1, Teacher 5]

There is not necessarily a simple link between social stigmatisation and bullying of disabled children within schools. Nevertheless, the interviewees accounts of an ‘absence’ of bullying was surprising, given the high frequency of school bullying reported in Indonesian media (No Bullying.com 2015) and national research (United Nations Children’s Fund 2012; Fataruba 2015).

Although in Bahasa Indonesia there is no direct translation for the term ‘stigmatisation’ (Lusli et al. 2015), the general meaning of a negative label was commonly understood. The anonymous questionnaire suggested a picture in which society (which here referred to formal government policies and practices) did not stigmatise but where stigmatisation was relatively common amongst teachers’ own colleagues. By contrast in the interviews stigmatisation was largely reported as not existing within the schools, possibly in the locality (one interviewee) but more often existing ‘further away’.

It is common for questionnaires and interviews to produce different outcomes when researching inclusive education (Komardjaja 2005; Kurniawati et al. 2012). However, the questionnaire results seem to support other Indonesian research regarding teachers’ attitudes (Tucker 2013; Kurniawati 2014) and beliefs that signing stigmatises children (Sheehy and Budiyanto 2014). There is evidence that Indonesian pupils have a widespread fear of reporting harassment or bullying (United Nations Children’s Fund 2012), which may reflect a culture of downplaying these matters. This might imply that the interview participants may also have felt constrained in their responses and how they represented their schools during the recorded face to face interviews. This is a particularly sensitive issue in schools striving to be, and be seen as, inclusive. This suggests that if we are to develop our understanding of stigmatisation and its effects on schools and KWS, then the advantages of different research methods need to be considered. Whilst less flexible than interviews the anonymity of questionnaires, or vignettes approaches (Scior 2011), may facilitate teachers in

commenting on sensitive issues regarding their own schools. Alternatively, future research might utilise ethnographic and participant observations to gain deeper insights into sensitive issues within pilot schools (Grimes 2013). Children's experiences, and beliefs about SI are currently absent from the research literature. They would be valuable in their own right in developing the approach (Meuris, Maes, and Zink 2014) and also provide an alternative insider perspective on the issue of stigmatisation.

The nature of happiness in inclusive pedagogy

The relationship between happiness and learning arose in many interviews as an essential feature of (inclusive) classroom pedagogy. However, this issue required considerable discussion for the English language researchers to comprehend the concepts that teachers were describing and their intended meanings. The teachers used two terms in referring to happiness *Senang* and *Suka*, the former being a general term for individualised happiness and the latter focusing on a 'networked' emotion which is part of social interaction.

[The key thing is that] they learned together [*our emphasis*] using Signalong. ..has made the learning moment, learning process be more enjoyable. ... [SI makes] it is easy for disabled and non-disabled students to learn together ... This is the point

[School 1, Teacher, 3]

... if I use Signalong to teach in every child it's more fun and joyful for the children [School 2, Teacher 2]

If they give happiness to the students they will receive the lesson more easily, they will remember easily what the teacher gives to them [School 1, Teacher 4]

The students felt happier ... So, it is very good even when it is used by able-bodied students ... [School 2, Teacher 4]

In the above points the teachers used *Suka* to describe the happiness experienced by children. SI potentially could 'allow' teachers to teach an inclusive class, and this created a happy socially engaged atmosphere. This happiness was not seen a peripheral effect but as a central feature of an effective inclusive classroom.

For others the 'joy' occurred because SI made the learning demands of the classroom more accessible and this was referred to using the term *Senang*, a more general term used in the interviews to indicate an 'individual happiness'.

Signalong maybe is more joyful because sometimes we learn science, they think it's difficult to learn science but if I make the science with Signalong they are very joyful in any science study with me [School 1, Teacher 1]

My motivation is first to help the students to understand and secondly to make them happy to learn. ..When we use signs the students learn quickly ... We don't need to use lot of words..[a single sign] and they will understand [the key concept] [School 2, Teacher 4]

and enjoy, ... just do the symbol and they understand what the teacher's saying. [School 2, Teacher 3]

This effect was seen as having consequences for the teachers themselves.

So Signalong is really interesting for them and teaching Signalong makes them happy, ... so it makes the teacher more motivated to teach more, make them happy [School 1, Teacher 3]

If teachers are motivated, this will motivate the students ... Togetherness arises in learning ... All are happy [School 2, Teacher 1]

and supported a notion of all children learning together.

All should sign.-Yes it's really helpful because of the mixing in the class [*between children with special educational needs and their peers*],. So they will more respect each other, empathy, ... more respectful. [School 1, Teacher 2].

However, it must be borne in mind that these positive effects were being suggested largely by teachers who had not necessarily used SI but only observed its use within their schools. Teachers could indicate these positive effects for inclusive classes within their school but see this as relevant only for those specific classes (and not their own) or individual children.

Happiness is an established topic in researching experiences of inclusion and segregation in western education (Cook, Swain, and French 2001) and children's wellbeing research encompasses the relationship between subjective happiness and academic performance (Cuñado and de Gracia 2012; Uusitalo-Malmivaara 2011). However, 'Although there have been many studies investigating happiness [*as a*] dimension in Western societies, relatively is known about it in the Eastern societies' (Jaafar et al. 2012). There are cultural differences in the conceptualisations and definitions of happiness, with a Western notion emphasising individualism in contrast to collectivist cultures that foreground 'harmonious relationships with other members of society' (Jaafar et al. 2012, 550). The teachers we interviewed were not always referring to an 'individualised' happiness, which characterises Western research. This resulted in considerable, unexpected, discussion with the teachers and within our international research team to understand each other's perspectives. Whilst at a general level categories of emotions are similar across cultures, fine-grained distinctions are made for subcategories of emotions. The Indonesian language has a greater (than English) degree of referring to emotions in social rather than individualistic terms (Shaver, Murdaya, and Fraley 2001). Consequently, the Indonesian language's emotional lexicon regarding happiness has nuances that are different from, and more social in nature than, European English (Shaver, Murdaya, and Fraley 2001). Our interviewees described a relationship between happiness and pedagogy that was markedly different to that encountered in Western educational literature. Western educators have suggested that happiness can be a 'a tool for facilitating effective education' (Fox Eades, Proctor, and Ashley 2013, 1), seeing happiness promoted 'alongside' educational excellence (Fox Eades, Proctor, and Ashley 2013). In contrast, the teachers' discussions of pedagogy described social emotional networks within which learning arose and existed. Learning was not seen as separate from this emotional enmeshment, but part of it. It did not happen 'alongside' happiness.

No research to date has identified or explored the Indonesian conceptualisation of the relationship between happiness and inclusive pedagogy. More broadly, research specifically looking at the nature of happiness within inclusive pedagogy is absent, possibly because of a Western conceptualisation of the relationship between emotions and learning. This area could be explored further if framed by a Vygotskian perspective, which argues

against a dualistic view of emotion and learning (Mesquita 2012), to create a common conceptual framework to help researchers from Indonesia and Europe work together.

The research gained insights into teachers' beliefs and experience in the pilot schools. These suggested several, interacting, factors that need to be considered in developing and implementing SI further. There is a need to review the 'withdraw and return' model of training. The new approach should explicitly address the issue of stigmatisation and develop an overall approach to address this issue within schools. The purpose and nature of SI needs to be foregrounded and made more explicit within the materials provided for schools. The interplay between beliefs about SI, stigmatisation and the type of training activities should be researched to support ongoing development. This would help understand, and address, the situation where teachers hold positive attitudes towards SI, yet do not use it themselves. Neither of these schools used alternative augmentative communication programmes, such as PECS (Bondy 2012) or TEACCH (Panerai, Ferrante, and Zingale 2002). A future area for research will be to explore how SI might interact, and be used with, any existing communication and language programmes used within other schools.

Conclusion

There is evidence that keyword signing is being used in some Asian countries (Signalong Group 2012; The Makaton Charity 2012). However research into the use of keyword signing in schools is lacking. This research gathered data for the first time from schools where SI was being piloted. The findings suggest that a new model of teacher training is needed, along with revised classroom materials, if the approach is to support inclusive practices within schools rather than developing isolated 'signing teachers'. The current research suggests that the issue of stigmatisation may be significant even within inclusive schools, and that the selection of research methods is particularly important in accessing teachers' beliefs about, and experiences of, this issue.

This research highlights, for the first time, that the pedagogy within inclusive Indonesian schools may have a different underpinning conceptualisation to that noted in Western research. This has implications for future research within the field of inclusive education, in understanding and developing pedagogies that are Indonesian in nature. It also delineates a new research area that seeks to understand the relationship between happiness and inclusive pedagogy in Indonesian and other cultures.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Dr Budiyanto is an active researcher and advocate for inclusive education within Indonesia. He is a senior lecturer at the State University of Suraya (UNESA) and supervises research and teacher training. He researches with international colleagues on projects that aim to have a positive and practical impact on the opportunities and experiences of disabled learners.

Prof. Kieron Sheehy researches and teaches within the broad field of inclusive education, often focusing on how teaching approaches or services can be developed to successfully support diverse groups of learners. He has a particular interest in addressing issues for those who might be stigmatised and excluded within educational systems.

Dr Helen Kaye is a senior lecturer at the Open University, UK, where she teaches psychology. Her research interests are in the field of learning and her recent work has investigated factors influencing university student learning.

Khofidotur Rofiah, S.Pd., M.Pd., is a lecturer at Surabaya State University. (UNESA), where she supervises educational research students and teaches on special education courses.

References

- Ainscow, Mel. 2012. "Moving Knowledge Around: Strategies for Fostering Equity Within Educational Systems." *Journal of Educational Change* 13 (3): 289–310. doi:10.1007/s10833-012-9182-5.
- Alcser, K., C. Antoun, A. Bowers, J. Clemens, and C. Lien. 2011. *Ethical Considerations in Surveys. Cross-Cultural Survey Guidelines*. Accessed 25 January 2015. <http://ccsg.isr.umich.edu/ethics.cfm>.
- Avramidis, Elias, and Brahm Norwich. 2002. "Teachers' Attitudes Towards Integration/Inclusion: A Review of the Literature." *European Journal of Special Needs Education* 17 (2): 129–147. doi:10.1080/08856250210129056.
- Bondy, Andy. 2012. "The Unusual Suspects: Myths and Misconceptions Associated with PECS." *The Psychological Record*, no. 195762: 789–816. <http://www.pecs-greece.com/Brochures/Bondy-TPRVOL62No4.pdf>.
- Bradshaw, Pete, Peter Twining, and C. S Walsh. 2012. "The Vital Program: Transforming ICT Professional Development." *American Journal of Distance Education* 26 (2) (June 2012): 37–41. <http://www.tandfonline.com/doi/abs/10.1080/08923647.2012.655553>.
- Branson, Jan, and Don Miller. 1998. "Nationalism and the Linguistic Rights of Deaf Communities: Linguistic Imperialism and the Recognition and Development of Sign Languages." *Journal of Sociolinguistics* 2 (1): 3–34. doi:10.1111/1467-9481.00028.
- Branson, Jan, and Don Miller. 2004. "The Cultural Construction of Linguistic Incompetence Through Schooling: Deaf Education and the Transformation of the Linguistic Environment in Bali, Indonesia." *Sign Language Studies* 5 (1): 6–38. doi:10.1353/sls.2004.0021.
- Braun, V., and V. Clarke. 2006. "Using Thematic Analysis in Psychology." *Qualitative Research in Psychology* 3 (2): 77–101.
- British Psychological Society. 2014. *Code of Human Research Ethics*. Leicester: British Psychological Society.
- British Psychological Society. 2015. "Ethics FAQ." *Ethics and Standards*. <http://www.bps.org.uk/what-we-do/ethics-standards/ethics-qa/ethics-qa>.
- Bryen, D. N., A. S. Goldman, and S. Quinlisk-Gill. 1988. "Sign Language with Students with Severe/Profound Retardation: How Effective Is It?" *Education and Training in Mental Retard* 23: 129–137.
- Burman, E. 2001. "Interviewing." In *Qualitative Methods in Psychology*, edited by C. T. P. Banister, E. Burman, I. Parker, and M. Taylor, 49–71. Buckingham: Open University Press.
- Clibbens, J. 2001. "Signing and Lexical Development in Children with Down Syndrome." *Down's Syndrome: Research and Practice* 7: 101–105.
- Clough, P., and L. Barton. 1995. *Making Difficulties: Research and the Construction of Special Educational Needs*. London: Paul Chapman Publishing.
- Cook, Tina, John Swain, and Sally French. 2001. "Voices from Segregated Schooling: Towards an Inclusive Education System." *Disability & Society* 16 (2): 293–310. doi:10.1080/09687590120035852.
- Cuñado, Juncal, and Fernando Pérez de Gracia. 2012. "Does Education Affect Happiness? Evidence for Spain." *Social Indicators Research* 108 (1): 185–196. doi:10.1007/s11205-011-9874-x.

- Doherty-Sneddon, Gwyneth. 2008. "The Great Baby Signing Debate." *The Psychologist* 21 (6): 300–304.
- Dunst, Carl J., and Deborah W. Hamby. 2011. "Influences of Sign and Oral Language Production of Young Children with Disabilities." *CELL Reviews* 4 (4): 1–20.
- Effendi, Juniati. 2014. "Deaf Community's Demands Go Unheard." *The Jakharta Post*, February 23.
- Fataruba, Rina. 2015. "Mental Revolution of Child Bullying Victims in Indonesia?: Parenting Styles and Ethnic Groups Effect." *International Journal of Research Studies in Psychology* 4 (3): 99–108.
- Fereday, J., and E. Muir-Cochrane. 2006. "Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development." *International Journal of Qualitative Methods* 5 (1): 80–92. doi:10.1177/160940690600500107.
- Ferguson-Patrick, K. 2012. "Developing an Inclusive Democratic Classroom 'in Action' Through Cooperative Learning." *Australian Association for Research in Education* 1–12. <http://files.eric.ed.gov/fulltext/ED542298.pdf>.
- Florian, Lani, and Kristine Black-Hawkins. 2011. "Exploring Inclusive Pedagogy." *British Educational Research Journal* 37 (5): 813–828. doi:10.1080/01411926.2010.501096.
- Florian, Lani, and Martyn Rouse. 2009. "The Inclusive Practice Project in Scotland: Teacher Education for Inclusive Education." *Teaching and Teacher Education* 25 (4). Elsevier Ltd: 594–601. doi:10.1016/j.tate.2009.02.003.
- Fox Eades, Jennifer M., Carmel Proctor, and Martin Ashley. 2013. "Happiness in the Classroom." In *Oxford Handbooks Online Happiness*, edited by A. C. David, S., Boniwell, and I. Ayers, 1–11. doi:10.1093/oxfordhb/9780199557257.013.0044.
- Grimes, Peter. 2013. "Considering the Continuing Development of Inclusive Teachers: A Case Study from Bangkok, Thailand." *European Journal of Special Needs Education* 28 (2): 187–202. doi:10.1080/08856257.2013.778112.
- Harris, L., and G. Brown. 2010. "Mixing Interview and Questionnaire Methods: Practical Problems in Aligning Data." *Practical Assessment Research & Evaluation* 15 (1): 1–19.
- Isma, S. T. P. 2012. *Signing Varieties in Jakarta and Yogyakarta: Dialects or Separate Languages?* The Chinese University of Hong Kong. http://www.cuhk.edu.hk/lin/new/doc/ma_papers/macla/Silva_2011-12.pdf.
- Jaafar, Jas Laile, Mohd Awang Idris, Jamal Ismuni, Yoo Fei, Salinah Jaafar, Zahir Ahmad, Muhammad Raduan Mohd Ariff, Bagus Takwin, and Yogi Suprayogi Sugandi. 2012. "The Sources of Happiness to the Malaysians and Indonesians: Data from a Smaller Nation." *Procedia – Social and Behavioral Sciences* 65 (2012). The Authors:549–556. doi:10.1016/j.sbspro.2012.11.164.
- Klingner, Janette K., and Alison G. Boardman. 2011. "Addressing the "Research Gap" in Special Education Through Mixed Methods." *Learning Disability Quarterly* 34 (3): 208–218.
- Komardjaja, Inge. 2005. "The Place of People with Intellectual Disabilities in Bandung, Indonesia." *Health & Place* 11 (2): 117–120. doi:10.1016/j.healthplace.2004.10.008.
- Kortschak, Irfan, and P. Sitanggang. 2010. "Invisible People: Poverty and Empowerment in Indonesia." *National Program for Community Empowerment*. <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Invisible+People:+Poverty+and+Empowerment+in+Indonesia#0>.
- Kurniawati, Farida. 2014. "Teachers' Attitudes, Knowledge, and Teaching Strategies towards Students with Special Educational Needs in Primary Inclusive Education in Indonesia." *Rijksuniversiteit Groningen*.
- Kurniawati, Farida, Alexander Minnaert, Frieda Mangunsong, and Wondimu Ahmed. 2012. "Empirical Study on Primary School Teachers' Attitudes Towards Inclusive Education in Jakarta, Indonesia." *Procedia – Social and Behavioral Sciences* 69 (Icepsey 2012). Elsevier B.V.: 1430–1436. doi:10.1016/j.sbspro.2012.12.082.
- Ladd, Paddy, and Harlan Lane. 2013. "Deaf Ethnicity, Deafhood, and Their Relationship." *Sign Language Studies* 13 (4): 565–579. doi:10.1353/sls.2013.0012.
- Lámh. 2008. "A Manual Sign System for People with Intellectual Disabilities and Communication Needs in Ireland." <http://www.lamh.org/>.

- Lewis, M. Paul, Gary F. Simons, and Charles D. Fennig. 2015. "Ethnologue: Languages of the World." In *Ethnologue: Languages of the World*. 18th ed. <https://www.ethnologue.com/country/ID>.
- Loncke, F. 2014. *Augmentative and Alternative Communication: Models and Applications for Educators, Speech-Language Pathologists, Psychologists, Caregivers, and Users*. San Diego, CA: Plural Publishing.
- Lopez-Fernandez, Olatz, and José F. Molina-Azorín. 2011. "The Use of Mixed Methods Research in Interdisciplinary Educational Journals." *International Journal of Multiple Research Approaches* 5 (2): 269–283. doi:10.5172/mra.2011.5.2.269.
- Lusli, Mimi, Marjolein B. M. Zweekhorst, Beatriz Miranda-Galarza, Ruth M. H. Peters, Sarah Cummings, Francisia S. S. E. Seda, Joske F. G. Bunders, and Irwanto. 2015. "Dealing with Stigma: Experiences of Persons Affected by Disabilities and Leprosy." *BioMed Research International* 2015: 261329. doi:10.1155/2015/261329.
- Mandel, Linda Ann, and Patricia Livingston. 1993. "The Effect of Signing Key Words for Demonstrating Work Instructions to Students with Learning." *Journal of Rehabilitation* 59 (2): 43–48.
- McGillicuddy, S., and G. M. O'Donnell. 2014. "Teaching Students with Autism Spectrum Disorder in Mainstream Post-Primary Schools in the Republic of Ireland." *International Journal of Inclusive Education* 18 (4): 323–344. doi:10.1080/13603116.2013.764934.
- Mcknight, L., and C. Davies. 2012. *Current Perspectives on Assistive Learning Technologies. 2012 Review of Research and Challenges within the Field*. Oxford: Kellogg College Centre for Research into Assistive Technologies.
- Mesquita, Giovana Reis. 2012. "Vygotsky and the Theories of Emotions: In Search of a Possible Dialogue." *Psicologia: Reflexão E Crítica*, 809–816. doi:10.1590/S0102-79722012000400021.
- Meuris, Kristien, Bea Maes, and Inge Zink. 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). Elsevier Ltd.: 2585–2601. doi:10.1016/j.ridd.2014.06.020.
- Millar, D. C., J. C. Light, and R. W. Schlosser. 2006. "The Impact of Augmentative and Alternative Communication Intervention on the Speech Production of Individuals with Developmental Disabilities: A Research Review." *Journal of Speech, Language, and Hearing Research* 49 (2): 248–264.
- Mirenda, 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): 203–216.
- Mistry, Malini, and Danielle Barnes. 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*, 2015: 1–14. doi:10.1080/03004279.2011.631560.
- No Bullying.com. 2015. "Bullying in Indonesia." *Bullying Facts*. <http://nobullying.com/bullying-in-indonesia/>.
- Onwuegbuzie, Anthony J. 2012. "Introduction: Putting the MIXED Back into Quantitative and Qualitative Research in Educational Research and Beyond: Moving Toward the Radical Middle." *International Journal of Multiple Research Approaches* 6 (3): 192–219. doi:10.5172/mra.2012.6.3.192.
- Palfreyman, N. B. 2011. "Variation in Indonesian Sign Language." *Book of Abstracts*. <http://lingweb.eva.mpg.de/jakarta/isloj3/abstracts/Palfreyman.pdf>.
- Panerai, S., L. Ferrante, and M. Zingale. 2002. "Benefits of the Treatment and Education of Autistic and Communication Handicapped Children (TEACCH) Programme as Compared with a non-Specific Approach." *Journal of Intellectual Disability Research* 46 (4): 318–327.
- Ramos-Mattoussi, Flavia, and Jeffrey Ayala Milligan. 2013. *Building Research and Teaching Capacity in Indonesia Through International Cooperation*. New York: Institute of International Relations (IIE). www.iie.org/cip.

- Rudd, Helen, Nicola Grove, and Tim Pring. 2007. "Teaching Productive Sign Modifications to Children with Intellectual Disabilities." *Augmentative and Alternative Communication* 23 (2): 154–163. doi:10.1080/07434610601124867.
- Schlosser, R. W., and J. Sigafoos. 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): 1–29.
- Schlosser, R., and O. Wendt. 2008. "Effects of Augmentative and Alternative Communication Intervention on Speech Production in Children with Autism: A Systematic Review." *American Journal of Speech-Language Pathology* 17 (3): 212–230.
- Scior, Katrina. 2011. "Public Awareness, Attitudes and Beliefs Regarding Intellectual Disability: A Systematic Review." *Research in Developmental Disabilities* 32 (6): 2164–2182. Elsevier Ltd. doi:10.1016/j.ridd.2011.07.005.
- Shaver, Phillip R., Upekkha Murdaya, and R. Chris Fraley. 2001. "Structure of the Indonesian Emotion Lexicon." *Asian Journal of Social Psychology* 4 (3): 201–224. doi:10.1111/1467-839X.00086.
- Sheehy, K., and Budiyo. 2014. "Teachers' Attitudes to Signing for Children with Severe Learning Disabilities in Indonesia." *International Journal of Inclusive Education* 18 (11): 1143–1161. doi:10.1080/13603116.2013.879216.
- Sheehy, K., and Budiyo. 2015. "The Pedagogic Beliefs of Indonesian Teachers in Inclusive Schools." *International Journal of Disability, Development and Education* 62 (5): 469–485. doi:10.1080/1034912X.2015.1061109.
- Sheehy, K., and H. Duffy. 2009. "Attitudes to Makaton in the Ages of Integration and Inclusion." *International Journal of Special Education* 24 (2): 91–102.
- Sigafoos, J., and E. Drasgow. 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: 152–161.
- Signalong Group. 2012. "Signalong." <http://www.signalong.org.uk/index.htm>.
- Snell, Martha E., Nancy Brady, Lee McLean, Billy T. Ogletree, Ellin Siegel, Lorraine Sylvester, Beth Mineo, Diane Paul, Mary Ann Ronski, and Rose Sevcik. 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): 364–380. doi:10.1352/1944-7558-115-5.364.
- Sunardi, Sunardi, Mucawir Yusuf, Gunarhadi Gunarhadi, Priyono Priyono, and John L. Yeager. 2011. "The Implementation of Inclusive Education for Students with Special Needs in Indonesia." *Excellence in Higher Education* 2 (1): 1–10. doi:10.5195/ehe.2011.27.
- Suwayani, N. 2008. "Policy Analysis of Education Provision for Disabled Children in Indonesia: A Case Study of Eight Primary Schools in Kecamatan Jatiwulung." *PQDT – UK & Ireland*. <http://ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.479388>.
- Tan, X. Y., D. Trembath, K. Bloomberg, T. Iacono, and T. J. N. Caithness. 2014. "Acquisition and Generalization of Key Word Signing by Three Children with Autism." *Developmental Neurorehabilitation* 17 (2): 125–136.
- The Makaton Charity. 2012. "Makaton." <http://www.makaton.org/>.
- Tucker, Anne Currier. 2013. *Interpreting and Treating Autism in Javanese Indonesia*. University of California.
- UNESCO. 2009. *Towards Inclusive Education for Children with Disabilities: A Guideline*. Bangkok: UNESCO Bangkok.
- UNESCO. 2014. *EFA Global Monitoring Report 2013/14. Teaching and Learning: Achieving Quality for All. Strong Foundations. Early*. Vol. Teaching a. Paris. <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:EFA+Global+Monitoring+Report:#5>.
- United Nations Children's Fund. 2012. *Child Protection in Educational Settings. Findings from Six Counties in East Asia and the Pacific* (Strengthening Child Protection Systems Series: No 2). Bangkok. http://www.unicef.org/eapro/CP-ED_Setting.pdf.
- Uusitalo-Malmivaara, Lotta. 2011. "Global and School-Related Happiness in Finnish Children." *Journal of Happiness Studies* 13 (4): 601–619. doi:10.1007/s10902-011-9282-6.

Vandereet, Joke, Bea Maes, Dirk Lembrechts, and Inge Zink. 2011. “Expressive Vocabulary Acquisition in Children with Intellectual Disability: Speech or Manual Signs?” *Journal of Intellectual & Developmental Disability* 36 (2): 91–104. doi:10.1080/13668250.2011.572547.

Appendix 1. Signalong Indonesia questionnaire

1. What is your current occupation?	Inclusive school teacher Special school teacher Other (please describe)
2. In which region of Indonesia is your school?	
3. Have you received Signalong Indonesia training?	Yes No
4. Are there children in your <i>school</i> who you feel would benefit from using Indonesia Signalong?	Yes No
5. Are there children in own <i>class</i> who you feel would benefit from using Indonesia Signalong?	Yes No
If you answered 'yes' to 3 or 4, please could your describe why this child/y children might benefit from using Indonesia Signalong?	
6. Do you use signing in your class?	Yes No
If you answered 'yes' Has using signing changed the way you teach in your classroom ?	
If you answered 'yes' Could you tell us about how your teaching has changed?	
If you answered 'yes' Can you describe the child(ren) that you use signing with (tick all that apply)	
If you answered 'yes' Do you asses the language development of children who sign in your school	
7. Do you need signs that are not in the current Signalong Indonesia dictionary? .(e.g. a particular curriculum area or specific concepts	All children in the class Children who cannot speak. Children who can speak a little Children with a minimum level of comprehension Other (please describe) No Yes (Please describe how you assess it)
	Yes No
If you answered 'yes', please indicate these signs that would be useful for you to have.	
8. Please describe how colleagues in your school feel about signing ?	
9. If you do not use signing in your class –can you tell us why you don't use it?	
10. Do you have any questions about how to use signing? Please indicate these are here)	
11. Do you feel that signing stigmatizes children in society?	Yes No

If yes, can you tell us why you
think it stigmatizes them?
How might we deal with this?

12. Do you feel that colleagues see signing as stigmatizing children? Yes No

13. What support would help you in developing the use of Indonesia Signalong in your school?

14. Do you have a smart phone or tablet that could be used in your class? Yes No

15. Would you like to use a smart phone or tablet as part of classroom teaching (e.g. to create signed stories or look up signs for activities) YesNo

16. Do you use any particular teaching methods in your classroom (e.g. jigsaw method, cooperative learning or 1 to 1 behavioural teaching), No
Yes (please give details)

17. Open Comment

Is there anything that you'd like to share about the use of signing in your school or how you feel about the use of signing? Please include any comments you'd like to make?
Are there any issues that you feel should be covered in future training workshops?
