

CHALLENGES EXPERIENCED IN THE PRACTICE OF SIGN BILINGUAL EDUCATION AS A STRATEGY FOR INCLUSION OF DEAF CHILDREN IN MAINSTREAM SCHOOLS IN ZIMBABWE

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ABSTRACT

This study sought to establish and examine challenges that could be experienced in the practice of sign bilingual education as a strategy for inclusion of deaf children in mainstream schools in Zimbabwe. The study was predominantly qualitative and adopted both discourse and conversation analysis designs. Personal face-to-face and focus group interviews were used to collect data which were presented in form of direct quotations and descriptive summaries and analysed using theme identification and thick descriptions. The study revealed that the challenges experienced in the practice of sign bilingual education as a strategy for inclusion of deaf children in Zimbabwe included denial, negative and non-committal attitudes; limited or lack of resources and skills; unclear policies and low enrolment of deaf children in mainstream schools. On these bases, the study concluded that, if not mitigated, these challenges could make it difficult for the country to realise the full benefits of sign bilingual education as a strategy for the inclusion of deaf children in mainstream schools in the country. In response, the study recommended awareness campaigns, training and staff development, resource mobilisation, policy review, early exposure and co-enrolment as means of mitigating these challenges.

Key Words: Sign bilingual education; Deaf children; Mainstream school; Inclusion; Co-enrolment

INTRODUCTION

Sign bilingual education which entails complex but equitable use of sign and oral language in which oral language is in the form of writing and reading has demonstrated efficacy as a strategy for inclusion of deaf children in countries where it is well established. It evolved from Scandinavian countries. It then spread to the USA, UK and other European countries, Hong Kong, Brazil and many other countries around the world. Because of its relative newness, it has not been without challenges. These challenges are bound to be more pronounced in Africa and may derail its benefits particularly in Zimbabwe where even research on the subject is lacking. This study examines these challenges in Zimbabwe with the view of proffering recommendations that would mitigate the challenges and facilitate the realisation of the benefits and efficacy of sign bilingual education as a strategy for inclusion of deaf children in mainstream schools in the country.

Deaf children can be defined either clinically or culturally. According to the Federal Disability Definitions Title 34, Part 300 Section 300.8 (2000:2) a deaf child is clinically one who has a hearing impairment that is so severe that she or he cannot process linguistic information

through hearing. Thus, a deaf child is one with hearing impairment who, despite having a rich cultural and Sign Language heritage, is excluded from the mainstream of education and cultural reproduction by perpetuation of the phonocentric worldview or unilateral use of speech (Dias, Mariani, Delou, Winagraski, Carvalho & Castro, 2014; Svartholm, 2014). From this medical point of view, deaf children are those children who are characterised by total loss of the hearing sense (Dias et al., 2014:492). In the cultural framing of deafness, Deaf children are conceptualised as those whose identity is guided and based on the visual-spatial language and framed on the collective linguistic and cultural patrimony of deafness (Batterbury, 2012; Kusters, De Meulder, Friedner & Emery, 2015). This article predominantly adopts the cultural and generic definition in which deaf children include those who are deaf and those who are hard of hearing (DHH) but being conscious of the clinical framing depending on particular contexts.

In emphasising the distinction between deaf with small letter 'd' and Deaf with capital letter 'D', the researchers only use Deaf with capital letter 'D' in limited cases to refer to the members of the Deaf community or to cultural deafness otherwise deaf with small letter 'd' is used to project the generic view of deafness (Swanwick, Dammeyer, Kristoffersen & Simonsen, 2016; Tang, 2016; Batterbury, 2012).

BACKGROUND TO THE STUDY

The idea and practice of sign bilingual education emerged as a challenge to aural-oral and monolingual approaches to the education of deaf children. Policy on best practices on sign bilingual education form the pillar on which challenges can be effectively mitigated. Background information related to the foundations, complexities and experiences of the challenges to the practice of sign bilingual education is provided to create a premise on which this study was founded.

Policy and Practice of Sign Bilingual Education

The Constitution of Zimbabwe (2013) Amendment Number 20, the Disabled Persons Act (1992) and the Education Amendment Act (2006) all call for non-discriminatory education for all. Policies such as Education Secretary's Circular Minute Number P36 of 1990; Education Secretary's Circular Minute Number 2 of 2001; Education Secretary's Circular Minute Number 20 of 2001; Education Director's Circular Minute Number 24 of 2001; the Education Director's Circular Minute Number 7 of 2005 and Education Director's Circular Minute Number 2 of 2010 advocate for inclusive education practices wherein Education Secretary's Circular Minute Number 2 and Education Director's Circular Minute Number 24 both of 2001 directly address issues promoting the use of sign bilingual education as a strategy for inclusion. The Education Amendment Act (2006) Section 12 Subsection 5 actually clearly articulates that Sign Language shall be the priority medium of instruction for the deaf and hard of hearing (DHH) and that both Sign Language and the reading and writing of other official spoken languages (sign bilingual education) shall be taught to the deaf in schools (DZT, 2015:9). However, there is no specific operational framework for practising sign bilingual education as a strategy for inclusion of deaf children in mainstream schools in Zimbabwe.

In one of the studies, Kermit (2010:161) concluded that, in the Scandinavian countries where it started, sign bilingual education has proved beneficial and that deaf students in inclusive schools in Sweden achieved better results than anywhere in the world due to sign bilingual interventions. Other studies conducted by Hansen (1987), Bergmann (1994), Lewis (1995) Mashie (1995) and Svartholm (2005; 2010) in Scandinavian/Nordic countries confirmed the success of sign bilingual education in those countries to the extent that the number of deaf children attending special schools had decreased to a minimum (Dammeyer, 2014:110). A study by Marschark, Tang and Knoors (2014) in UK proved that sign bilingual deaf children in inclusive classes who received 240 hours of sign bilingual input showed better inclusivity than deaf children who learnt through a monolingual mode. Sign bilingual education is now provided as a right to deaf children in mainstream schools particularly in Sweden (Hyde et al., 2006:418; Swanwick et al., 2016:3). Hult and Compton (2012:607) note that in Sweden, Sign Language is predominantly used as the subject of instruction for the deaf and this has facilitated the use of sign bilingualism in the whole educational domain in the schools. This change of practice coincided with the introduction of Sign Language as a subject where even hearing children are taught about Sign Language linguistics, Deaf culture and Deaf history (Dammeyer, 2014:110; Swanwick et al., 2016:4) to facilitate inclusivity. Plaza Pust (2005:1846) insinuates that one secret behind the success of sign bilingual education in Nordic countries particularly in Sweden, is its early introduction.

In Norway, special schools were transformed into resource centres in 1992. These resource centres according to Hyde et al. (2006:418) arrange courses and offer guidance and counselling to regular school teachers and hearing parents of deaf children in order to facilitate sign bilingual education. Hearing parents of deaf children are entitled to 40 weeks of training in sign bilingual education practice with free transport and accommodation and compensation for lost wages (Pritchard, 2005:1; Hyde et al., 2006:418; Swanwick & Gregory, 2007:25; Swanwick et al., 2016:3). In the USA, most of the deaf children are now educated in mainstream schools and training teachers for sign bilingual education is no longer experimental but a legal option that colleges and universities can offer under regularised standards and accreditation and a teacher of the deaf would ideally be fluent in both sign and oral language, be Deaf or if not Deaf very well acculturated in the Deaf culture (Humphries, 2013:20). A similar trend exists in the UK where, since 1998, a policy document entitled '*Sign Bilingualism: A Model*' which was developed and published by Pickersgill and Gregory and revised in 2007 has been used as a policy reference for sign bilingual practice (Pickersgill & Gregory, 2007:5; Swanwick, 2010:150). The document identifies curriculum access, planned use of language, language support for both hearing and deaf children, individualised programming, assessment and monitoring of needs, appropriate staffing, parental involvement and an ethos which recognises both hearing and deaf cultures and is deaf aware as pillars for successful sign bilingual education. In Hong Kong, sign bilingual education is established through collaborative teaching between a regular teacher and a Deaf individual who can sign (Tang & Yiu, 2015:2).

Foundations of The Challenges to The Practice of Sign Bilingual Education

The practice of sign bilingual is not without challenges. For Kushalnagar et al. (2012:7), perhaps the challenges faced in the practice of sign bilingual education are founded on the old impairment view of deafness as a medical condition that has a technological solution. Swanwick (2010:154)

observes that this impairment view is in stark contrast to the sign bilingual education perspective which promotes difference and diversity. The author further explains that the knowledge that deafness hinders full access to a spoken language with its cognitive and social emotional implications creates a conflict and ambiguity which is a puzzle unique to deaf education hence the need for sign bilingual education. This conflict and ambiguity illuminates the presence of likely challenges in the practice of sign bilingual education as a strategy for inclusion of deaf children in mainstream schools.

Humphries et al., (2014:31) identify under-informed professionals and hearing parents due to lack of training and experience as some of the major challenge for the practice of sign bilingual education. Pritchard (2014:2) concurs that the biggest challenge for sign bilingual education is whether the mainstream hearing teacher is fluent and familiar with sign bilingual teaching methods or not. For Pritchard, it is also an obvious challenge for hearing teachers to communicate in both modalities that is in Sign Language and spoken language. This could be due to modality differences between the two languages and the fact that many hearing teachers are not native users of Sign Language. Mason et al. (2010:35) earlier on noted that, owing to the fact that most parents and teachers are non-native signers, children enter sign bilingual education with poor Sign Language skills because of late exposure. This makes it possible to find deaf children who are not fluent in either language (Humphries, 2013:14) causing a challenge for the practice of sign bilingual education. Kermit (2010:161) actually sees the complexity of mastering both languages at an age appropriate level as a challenge on its own. Mayer and Leigh (2010:178) also observe that it is often the case that deaf children begin school with little or no proficiency in Sign Language, or in some cases in any language at all. This according to the authors puts the children at a decided disadvantage when they enter a sign bilingual education programme making it difficult to fully realise the intended benefits.

Complexities related to language development among deaf children

Conditions under which deaf children experience the development of language are varied and complex. For instance, it is usually the case that deaf children have not developed a sophisticated competence in any language by the time they start school (Musengi & Dakwa, 2011 in Musengi and Chireshe, 2012:4). This limited or little proficiency, particularly in Sign Language, affects the transfer between L1 and L2 since a minimum level of proficiency in L1 for the transfer to L2 should first occur (Mayer & Leigh, 2010:178) for proficient sign bilingualism to occur. In the same vein, Swanwick (2010:155) identifies the unresolved paradox about the transferability between sign and oral language due to modality difference as yet another challenge for the practice of sign bilingual education. The other major challenge for sign bilingual education in mainstream schools is that deaf children are often few to achieve a 1:3 or 1:4 ratio which is recommended for co-enrolment (Tang, 2016:3). Hermans, de Klerk, Wauters (2014:420) admit that creating a sign bilingual environment in a mainstream school is easier said than done in that the small population of DHH children, that is, 1 in 1000 live births makes it difficult to cluster them in regular settings in the neighbourhood. This observation reflects on a further challenging social experience by deaf children in sign bilingual education programmes in mainstream as opposed to special school or resource unit.

Social experience of deaf children in sign bilingual programmes

Consequently, Hsing (2015:2) concludes that emotional support that permeated deaf schools is being replaced by DHH students' feelings of loneliness in mainstream sign bilingual settings, since there are few such children in these settings. In these regards, for sign bilingual education to be appropriately implemented and be of benefit, increasing deaf enrolments in mainstream schools is one possible solution to resolve the problem of having lonesome 'deaf singletons' struggling on their own in the mainstream classroom (Knoors & Marschark, 2012:301). In such situations deaf children face difficulties such as low involvement in social interactions and low peer acceptance where factors such as language delay, poor speech intelligibility and lack of strategies to repair communication break downs impede their inclusion into the mainstream classroom (Tang & Yiu, 2015:1). Tang (2016:3) suggests that in order to mitigate the challenge of lower numbers of deaf children, there is need to partner sign bilingual education with co-enrolment in the mainstream schools, meaning that a critical mass of DHH children be brought into the mainstream classrooms. In addition to all the foregoing, is the challenge of catching up with practices in sign bilingual education which are characterized by rapidly changing language needs and profiles of deaf children as a function of hearing technologies (Tang, 2016:2; Swanwick, 2016b:1; Swanwick 2016:8 & 2010:155; Nausbaum et al., 2012:1). Meanwhile Mayer and Leigh (2010:179) cite lack of deaf adult models as yet another challenge. They elaborate that the challenge is to provide sufficient and timely access to a full model of a natural Sign Language.

METHODOLOGY

This research was predominantly qualitative. Qualitative research is a means for exploring and understanding the meaning participants ascribe to a social or human problem (Creswell, 2009:4). It is founded on the philosophy of Interpretivism which propounds that social reality is better understood from the participants' own point of views (Cohen, 2007:19). The study adopted both discourse and conversation analysis (Hancock, Ockleford & Windridge, 2009:7). Data were presented using direct quotations and descriptive summaries and analysed using theme identification and thick descriptions. Personal face-to-face interviews and focus group interviews (FGIs) were the main data collection instruments.

RESULTS AND DISCUSSION

Despite the many benefits of sign bilingual education as a strategy for inclusion of deaf children, this study revealed some challenges that were experienced in its practice in mainstream schools in Zimbabwe. The themes and sub-themes that emerged during the interviews and reflected on these challenges are presented on Table 1.

Table 1: Themes Relating to Sign Bilingual Education as a Strategy for Inclusion in Zimbabwe

Major Theme	Sub-Theme
<ul style="list-style-type: none"> • Attitudes • Resources 	Denial; negative; uncooperative; non-committal
<ul style="list-style-type: none"> • Skills 	Time; financial; sign language interpreters; specialist teachers of the deaf; deaf teachers; hearing technologies
<ul style="list-style-type: none"> • Policy 	Literacy; language; knowledgeability, communication; home-school language dilemma
<ul style="list-style-type: none"> • Enrolment 	Clarity; implementation; enforcement
	Low numbers; incongruent per capita

Attitudes

Denial attitude and lack of cooperation among parents coupled with negative attitudes of some administrators and mainstream teachers were found to be among the major challenges facing the practice of sign bilingual education as a strategy of inclusion of deaf children in Zimbabwe. *‘You see parents continue to display a denial attitude which tends to cloud the practice of sign bilingual education. Some parents do not want to hear about their deaf children being taught Sign Language because they still hold hope that, one day their child would speak. I don’t think they even recognize that sign and oral languages can function together’* narrated one teacher. Another teacher said, *‘The other major challenge is the negative attitudes exhibited by our administrators towards anything to do with deaf children. They seem to perceive these children especially those in the examination classes as a threat to the school’s academic competitiveness. So they would rather have us continue with oral at the expense of sign bilingual practices.’* Related to the negative attitudes was a non-committal attitude by the Ministry of Primary and Secondary Education and the Public Service Commission towards the practice of sign bilingual education as a strategy for inclusion of deaf children in mainstream schools in Zimbabwe.

The participants insisted that non-committal attitude was reflected in lack of adequate resource provision and limited enforcement of sign bilingual education friendly policies. One participant added, *‘Had the ministries been committed, teachers, parents and hearing children would have been trained long back.... but no resources have ever been put in place.’* The main source of such attitudes could be the old impairment view of deafness as a medical condition that has a technological solution for which Kushalnagar et al. (2012:7) designate as perhaps the strongest challenge faced by sign bilingual education the world over.

Resources

The challenge of resources is clearly reflected through poor Sign Language competency among teachers and administrators themselves. Lack of financial resources or preparedness to train deaf teachers is also a challenge for the practice of sign bilingual education as a strategy for inclusion of deaf children in mainstream schools in Zimbabwe. The participants bemoaned lack of training and staff development of teachers in sign bilingual skills. In a similar fashion, Pritchard (2014:2) posits that the biggest challenge for sign bilingual education is whether the mainstream hearing teacher is fluent and familiar with sign bilingual teaching methods or not. From what the participants said, there seemed to be reluctance to avail necessary human and technical resources

for the fully-fledged practice of sign bilingual education as a strategy for inclusion of deaf children in mainstream schools in Zimbabwe.

One participant commented, *'If we had deaf teachers it was going to be better. I only know of one deaf teacher in Zimbabwe who teaches at this special school which we were telling you about.'* The other quickly interjected, *'But we hardly have deaf people obtaining 5 'O' Levels including English Language and Mathematics required for teacher training.'* Another argued, *'Perhaps we need affirmative action because sign bilingual education can only work best with the involvement of deaf teachers. These have failed to train due to highly peached entry qualifications for teacher training. Otherwise colleges (teacher training) should have a component of sign bilingual education and us practising teachers should continually have staff development programmes.'* These excerpts suggest that there was no deliberate effort to train and develop deaf teachers as one of the means of facilitating the practice of sign bilingual education as a strategy for inclusion of deaf children in mainstream schools.

According to Tang (2016:9), the success of sign bilingual education programmes in Hong Kong is in effect attributed to the inclusion of a deaf teacher who serves as a Sign Language and social model not only for the deaf but also for the hearing children as well. Hsing (2015:2) also reports that in Hong Kong and the Netherlands, the roles of the sign bilingual model teachers are such that the hearing and the deaf teachers complement each other without repeating each other in the classroom. Tang and Yiu, (2015:2) also add that sign bilingual education is established through collaborative teaching between a regular teacher and a Deaf individual who can sign.

On further probing, many of the administrators also revealed that it would be ideal to hire deaf teachers if sign bilingual education was to be fully practiced. Both administrators and teachers concurred that hearing technologies that used to be available were no longer accessible for deaf children due to lack of donations after all. They saw the deployment of a deaf and hearing specialist teacher as a permanent solution. *One specialist teacher argued, 'Even the so called hearing technologies we are referring to constituted donated hearing aids which were never customised to the needs of the child. I can't even talk about cochlear implants they are hardly heard off in Zimbabwe. Deployment of both deaf and hearing specialists is the way to go.'* The other specialist teacher quipped, *'Are these hearing technologies an issue anyway in the advent of sign bilingual education? I think social and language issues take centre stage here.'* Ultimately, it turned out that hearing technologies were not a major challenge then since the participants later agreed that the real challenges were to do with the basic sociolinguistic factors of sign bilingual education including lack of trained deaf teachers.

Related to the foregoing was lack of qualified Sign Language interpreters. The participants reported this to be yet another great challenge to the practice of sign bilingual education as a strategy for inclusion of deaf children in mainstream schools in Zimbabwe. The situation was such that specialist teachers of the deaf were used for Sign Language interpretation but none of them were qualified Sign Language interpreters according to data collected from both administrators and teachers. The results confirm Musengi and Chireshe's (2012:113) conclusion that the Sign Language interpretation used in Zimbabwe is not real. On the issue of using qualified Sign Language interpreters which emerged during the interviews, many participants emphasised that the use of 'qualified' specialist teachers as Sign Language interpreters to facilitate the practice of sign bilingual education as a strategy for inclusion was not adequate as these teachers were not

native users of Sign Language. They also had no adequate time to perfect their sign bilingual skills through staff development and further training.

Lack of training also affects parents. In relation to training, Humphries et al., (2014:31) identify under-informed professionals and hearing parents due to lack of training and experience as another major challenge for the practice of sign bilingual education. In Norway, hearing parents of deaf children are entitled to 40 weeks of training in sign bilingual education practice with free transport and accommodation and compensation for lost wages (Pritchard, 2005:1; Hyde et al., 2006:418; Swanwick & Gregory, 2007:25; Swanwick et al., 2016:3). In the USA, most of the deaf children are now educated in mainstream schools and training teachers for sign bilingual education is no longer experimental but a legal option that colleges and universities can offer under regularised standards and accreditation and a teacher of the deaf would ideally be fluent in both sign and oral language, be Deaf or if not Deaf very well acculturated in the Deaf culture (Humphries, 2013:20).

According to the data, time was in effect another necessary resource in the practice of sign bilingual education as a strategy for inclusion of deaf children in Zimbabwe. Limited time particularly in view of the congested new curriculum was therefore identified as another challenge. *'Using sign bilingual education works well as a strategy for inclusion when you have adequate time. For one it is time consuming. So to catch up especially with the advent of the new curriculum which is too congested, I am at times tempted to resort to oral methods. But of course I know that this is unfair to the deaf...'* said one specialist teacher. This was a finding unique to this study since the concept of the 'new' curriculum was a recent phenomenon in Zimbabwe then. These revelations also predict the complexity of sign bilingual education as a practice which needs time, commitment of resources, knowledge and skills as well as careful planning.

Skills

Poor literacy skills among deaf children also featured prominently as a challenge affecting the practice of sign bilingual as a strategy for inclusion of deaf children in mainstream schools in Zimbabwe. Some young deaf children were reported to come from home with either meaningless home signs or no language at all. A specialist teacher quipped, *'Do you know that the greatest challenge faced in the practice of sign bilingual education in general is that some deaf children themselves are not fluent in Sign language? Some come from home with no Sign Language skills only to be taught by teachers who are not native users of Sign Language themselves. Even as specialist teachers we are not completely fluent in Sign Language you know.'* Another teacher in the same focus group interview added, *'This situation is worsened by the issue of language dilemma whereby the oral language of the home for instance differs from that used at school.'* According to Humphries (2013:14), it is possible to find deaf children who are not fluent in either language. The author says that this causes a challenge for the practice of sign bilingual education. Mayer and Leigh (2010:178) also observe that it is often the case that deaf children begin school with little or no proficiency in Sign Language, or in some cases in any language at all.

The foregoing suggests that one of the main challenges faced in the practice of sign bilingual education as a strategy for inclusion of deaf children in mainstream schools in Zimbabwe is that the deaf children at times cannot efficiently read, write or even sign. In relation to poor literacy skills among deaf children, participants were unanimous that administrators, mainstream

teachers and hearing children alike had poor Sign language skills and therefore were constrained in terms of practicing sign bilingual education. One teacher confided, *'Teachers, specialist teachers included, generally have poor Sign Language skills creating a challenge for practicing sign bilingual education. This challenge is worse with our administrators I tell you. Some of them do not even attempt and believe oralism should be the way to achieve inclusion of deaf children. It's frustrating Sir...'* Another said, *'This problem starts from home because hearing parents cannot communicate in native Sign Language. At best they use home signs and gestures which are often at variance with what we use here at school. You see, this further creates a more complex challenge for the children since at school they are subjected to a form of Sign Language at school which is different from that ordinarily used in the home.'* From these excerpts, communication is another challenge experienced in the practise of sign bilingual as a strategy for the inclusion of deaf children in mainstream schools in Zimbabwe.

There is also the challenge of home-school language dilemma experienced by deaf children. This challenge is unique to Zimbabwe due to the multiplicity of indigenous languages which tend to influence the forms of Sign Language used by the deaf children. At times the children are taught by teachers whose oral mother is not the one used in the deaf child's home. This further reflects on how language policies in Zimbabwe should be framed to cater for diverse deaf children's needs in the sign bilingual matrix.

Policy

On the issue of policy, one participant commented, *'Yes sign bilingual education is there but is not clearly specified in policy documents.'* Another participant blamed the whole situation on policy implementation and enforcement. The participant commented; *'While policies are good and are supportive of sign bilingual education in Zimbabwe, implementation and enforcement procedures are unclear and even the term sign bilingual education is somehow avoided.'* This suggests that many of the challenges facing the practice of sign bilingual education as a strategy for inclusion of deaf children in mainstream schools in Zimbabwe stem from lack of clarity and enforcement of policies on sign bilingual education. This is at variance with what obtains in the UK where since 1998, a policy document entitled *'Sign Bilingualism: A Model'* which was developed and published by Pickersgill and Gregory and revised in 2007 has been used as a policy reference for sign bilingual practice and is specific on issues of curriculum access, planned use of language, language support for both hearing and deaf children, individualised programming, assessment and monitoring of needs, appropriate staffing, parental involvement and an ethos which recognises both hearing and deaf cultures and is deaf aware as pillars for successful sign bilingual education (Pickersgill & Gregory, 2007:5; Swanwick, 2010:150).

Enrolment

Administrators were also unanimous that the minority nature of the deaf children made it difficult to commit resources, time and effort to sign bilingual education as a fully-fledged school wide programme. One teacher explained, *'It is difficult to convince administrators to set aside required resources which are so expensive considering the low enrolment statistics of deaf children making the practice of sign bilingual education very challenging, so to speak.'* An administrator concurred,

'It is impossible in per capita terms to fully provide for deaf children's sign bilingual needs since they are so few. So, there is incongruence between enrolment and per capita even if government were to channel financial resources on those grounds' On the minority nature of deaf children, Tang (2016:3), Hermans et al. (2014:420) and Hsing (2015:2) earlier on each found out that the limited number of deaf children was a serious challenge for the practice of sign bilingual education. In acknowledging this challenge, Tang and Yiu (2015:20) report that the Sign Bilingualism and Co-enrolment Program in Hong Kong stresses the importance of recruiting and enrolling a critical mass of deaf and hard of hearing (DHH) students to study with a larger group of hearing peers using an appropriate deaf-hearing ratio of about 1:3.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results, this study concluded that the challenges of the practice of sign bilingual education as a strategy for the inclusion of deaf children relate to negative and non-committal attitudes, limited or complete lack of resources, limited appropriate skills among administrators, teachers and children, unclear policies that lack effective implementation and enforcement procedures and the minority nature of deaf children in Zimbabwe. The implication of these challenges is that if they are not resolved, the benefits of sign bilingual education as a strategy for inclusion that have been demonstrated in those countries where it is well established may not accrue to Zimbabwe. On these bases the study proffers the following recommendations as means of mitigating these challenges:

Awareness campaigns should be conducted to educate administrators, teachers and hearing children in schools that use sign bilingual education and parents of deaf children on the need and benefits of sign bilingual education as a strategy for inclusion.

Expansion of programmes for the training of Sign Language interpreters and deaf teachers as well as capacitation of the training of specialist teachers of the deaf and staff development of mainstream teachers. A module on sign bilingual education as a strategy for inclusion must stand prominent in each of these programmes. This should be coupled with a vigorous resource mobilisation drive to capacitate the operations of the programme.

Deaf children should be deliberately exposed to sign bilingual education early in life, that is, at the Early Childhood Development (ECD) programme level.

Policies on sign bilingual education should be reviewed and made more specific particularly with regards to inclusivity of deaf children in mainstream schools. Implementation and enforcement procedures for these policies should be binding to all stakeholders and should be upheld.

A co-enrolment programme should be rolled out where deaf children within a wider catchment area are enrolled at one strategic inclusive school in order to achieve a 1:3 threshold required for effective co-enrolment (Tang & Yiu, 2015:2). Government should then put relevant resources such as transport in place.

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