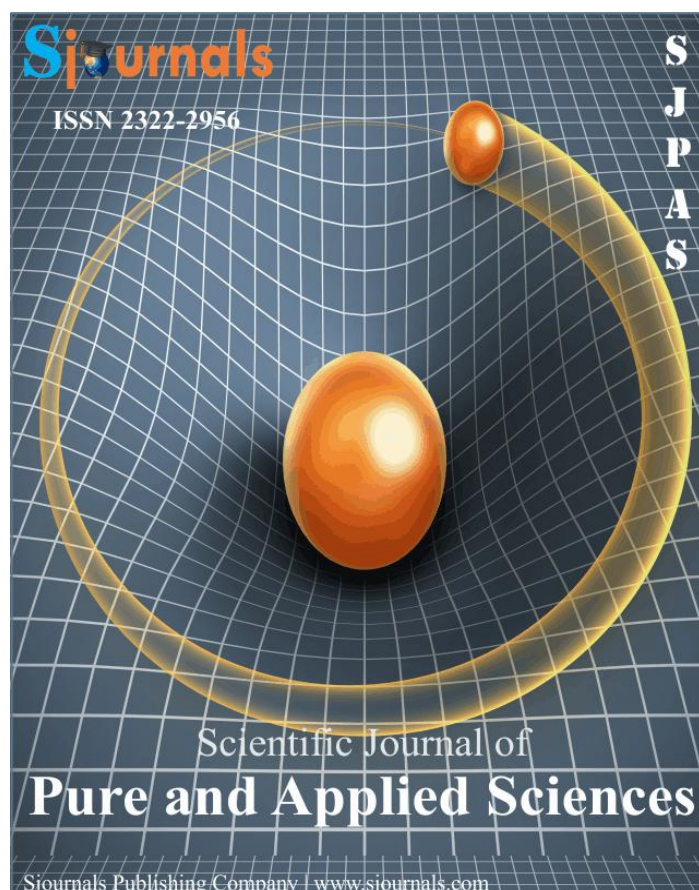


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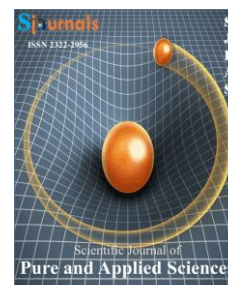
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Review article

Awareness of the benefits of sign bilingual education in the education of deaf children in Zimbabwe

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ABSTRACT

The study sought to interrogate the extent administrators, teachers and deaf children in the few mainstream schools that used sign bilingual education in Zimbabwe were aware of the benefits of sign bilingual education. The study adopted the mixed methods approach which is grounded in the philosophy of pragmatism. Employing the sequential explanatory design, the study involved 100 teachers, 30 administrators and 30 deaf children from schools that used sign bilingual education from the Bulawayo Metropolitan Province for the quantitative phase. One administrator and 6 teachers per school were engaged in the qualitative phase. Questionnaires were used to collect quantitative data while personal face-to-face and focus group interviews (FGIs) were used to collect qualitative data. The integrated results of the study indicated evidence of awareness of the benefits of sign bilingual education in the education of deaf children in inclusive mainstream schools in Zimbabwe. From the results, the study concluded that such awareness implied potential for more effective practice of sign bilingual education in the country in order to advance these benefits. Ultimately, the study recommended further research and proposed a framework of practice termed 'Sibanda's Framework of the Practice of Sign Bilingual Education in Zimbabwe.

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1. Introduction

Sign bilingual education evolved in the Nordic countries and spread to America, the United Kingdom, Hong Kong and many other countries around the world. Its benefits have been demonstrated in those countries where it is well established but in African countries such as Zimbabwe, there is paucity of research on sign bilingual education. There is therefore no guarantee about the awareness of the benefits of sign bilingual education in the country yet the study assumes that sign bilingual education can only be effectively practised in Zimbabwe if its benefits were known. This paper presents background literature to the benefits of sign bilingual education explicates the methodology that guided the current study, displays the results collected from school administrators, teachers and deaf children and draws and articulates conclusions from the results. The paper concludes by proffering recommendations that are premised on a proposed framework of sign bilingual education that can be adopted in Zimbabwe.

2. The rationale for sign bilingual education

The major impetus for the emergence of sign bilingual education has been the need to respond to poor results and the exclusive nature of aural-oral methods (Svartholm, 2010; Swanwick, 2016; Mitchner, 2015). New research (Svartholm, 2010; Hult and Compton, 2012; Swanwick, 2010; Mayer and Leigh, 2010; Humphries, 2013; Menken and Solorza, 2014; Yiu, 2015; Tang and Yiu, 2015; Hsing, 2015; Swanwick, 2016; Tang, 2016) has found a strong case for sign bilingual education as a strategy in the education of deaf children. For Dammeyer (2014) the change to sign bilingual approaches was made because of the discouraging results from educating deaf pupils only by speech with a focus on training phonological skills. Tang (2016) emphasises that sign bilingual education traditionally stemmed from the concern for developing a linguistic and cultural model of deafness using the premise that Sign Language is the first language for the deaf and hence sign bilingual education had to be devised to legitimise the use of Sign Language in inclusive deaf education settings. Kermit (2010) also adds that the main political argument for sign bilingual education is based on the historic notion of the poor outcomes of speech and aural-oral only rehabilitation before the emergence of cochlear implants.

3. The benefits of sign bilingual education

Sign bilingual education gives deaf children new opportunities to be exposed to Sign Language since they cannot use spoken language with ease (Kushalnagar et al., 2010). The authors conclude that the rationale for sign bilingual education draws on principles of bilingual and multilingual communication from around the world and that sign bilingual education is superior to monolingual education. To this effect, Garate (2014) reports that new evidence is constantly being presented showing that dual linguistic exposure enabled by sign bilingual education can result in mental flexibility, creative thinking and communication advantages for deaf children. Kermit (2010) and Knoors and Marschark (2012) also argue that sign bilingual education is not a political or philosophical issue but a means of providing deaf children with the best possible opportunities for educational and personal success. According to Swanwick et al. (2016), sign bilingual education was introduced with the goal of ensuring early language acquisition, equal access to the curriculum, successful inclusion of deaf children into the mainstream school and integration into the wider community. In these regards, sign bilingual education has implications for practice and professional development of a more plural view of language, learning and deafness that situates deaf children's multimodal and multilingual development within a contemporary view of inclusive bilingualism.

4. Implications of sign bilingual education

Sign bilingual education is in effect a multi-sensory approach which has the potential to effectively support the overall development of deaf and hard of hearing (DHH) children (Nussbaum et al., 2012). Leeson (2006) observes that in many countries the introduction of sign bilingual education has co-occurred with societal change in attitude towards the status of Sign Language and the emergence and appreciation of the philosophy of inclusion. This is because the rationale for sign bilingual education, according to Kushalnagar et al. (2012), draws on principles of bilingual and multilingual communication from around the world. Even at its infancy, sign bilingual education was seen as an unavoidable and highly productive path of language development and education for the

deaf child (Vygotsky, 1983). For Leeson (2006), sign bilingual education is flexible and can be adapted into an individually oriented approach and has a theoretical potential to promote the individual needs and interests of the child and thus improve his/her inclusion into the mainstream school. In the same context, a study by Knoors and Marschark (2012) concluded that sign bilingual education has merit and is one that should be considered for deaf students in mainstream schools and particularly those of hearing parents.

In another study, Hsing (2015) found out that parents of hearing children accepted sign bilingual education and that the deaf children enjoyed it because of its social and cultural flexibility. Meanwhile, According to Mitchell and Karchmer (2004) in Higgins and Liberman (2016), this is because about 95% of the deaf children are born to hearing parents meaning that these children may not have had access to Sign Language while the 5% deaf children of deaf parents may have lacked exposure to spoken language. Similarly, Knoors and Marschark (2012) believe that deaf children of deaf parents may also have insufficient Sign Language to profit from oral only or Sign Language only didactical strategies. In this context, the justification of sign bilingual education is also premised on the realisation that deaf children come from homes, communities and school environments where both a sign and spoken language are likely to be meaningfully present (Humphries, 2013).

Sign bilingual education also provides the best possible opportunities for the deaf children to achieve social inclusion, educational access and personal success further justifying the logic of locating it within the context of inclusion (Swanwick et al., 2016; Knoors and Marschark, 2012). Gregory (2006) posits that sign bilingual education encourages the involvement of the deaf as well as the hearing and the recognition of both the Deaf and hearing cultures. Yiu and Tang (2014) cited in Yiu (2015) studied the social acceptance between the deaf and hearing children in sign bilingual programmes and concluded that sign bilingual education facilitates positive peer acceptance, healthier peer interaction in the classroom and positive attitudes toward others and toward self. In the same vein, Humphries (2013) also believes that sign bilingual education optimises cultural interchanges between the deaf and the hearing thereby facilitating social interaction. In addition, the author emphasises that sign bilingual education enables robust and frequent peer interactions which enhance social development, social learning and inclusivity. This is corroborated by Schick et al. (2006) in Tang (2016) who articulate that, without sign bilingual education, DHH children have very little chance for participating in classroom discussions and social interactions. A number of studies on sign bilingual education cited by Swanwick et al. (2016) have also reported improved identity and psychosocial well-being (Bagga-Gupta, 2000; Dammeyer, 2010) due to early development of language and communication (Lewis, 1995; Mahshie, 1995; Smith et al., 1997) and improved peer interaction in the classroom (Kristoffersen and Simonsen, 2012, 2014). WFD (2016) believes that sign bilingual education promotes accessibility to all spheres of social, economic, cultural, political and civil life and enables full access to quality education. This has made sign bilingual education a preferred and popular educational strategy for inclusion even among Deaf communities (WFD, 2011).

With regards to language, literature is replete with studies that have recorded encouraging results suggesting the efficacy of sign bilingual education in bridging the communication gaps that act as barriers to the inclusion of deaf children into mainstream schools. Yiu (2015) believes that sign bilingual education is a promising and valuable option for effectively lowering communication barriers possessed in mainstream classrooms. For Hult and Compton (2012) sign bilingual education makes the mainstream settings robust domains for language development. This, the deaf children do not do by learning to speak the oral language but by learning the literacy skills of reading and writing (Mweri, 2014) and then using Sign Language for scaffolding these literacy skills (Glaser and Van Pletzen, 2012) and gaining access to the hearing environment. Thus sign bilingual education mutually encourages the development of both languages and leads to improved social and academic interchanges in the mainstream classroom (WFD, 2016). Mitchner (2015) reports that by using multiple linguistic measures in a longitudinal study, Rinaldi and Caselli (2014) confirmed that sign bilingual education offered opportunities for Sign Language to support the acquisition of spoken/written language thereby facilitating communication among the deaf and hearing.

There is also another strong argument that sign bilingual education offers a natural environment for both deaf and hearing children to exercise linguistic freedom in inclusive settings. Swanwick et al. (2016) argue that, naturally many deaf children switch between sign and spoken languages in their everyday lives by engaging in trans-linguaging in which they mix and switch between modalities. Thus deaf children's alternate and blended use of sign and spoken language is a normal component of bimodal-bilingual communication in natural inclusive contexts which can be resonated through sign bilingual education in inclusive education setups. In other words, sign bilingual education offers a natural opportunity for both hearing and deaf children to develop strong social

ties within the mainstream school. Humphries (2013) confirms that deaf people interact on a daily basis with the Sign Language used in their community as well as with the spoken language used by hearing people among whom they are embedded in their everyday life.

The afore-said linguistic opportunities further suggest the potential of sign bilingual education to offer access to the curriculum. Gregory (2006) postulates that sign bilingual education facilitates personal and social development and enables deaf children to access the mainstream curriculum. In effect, sign bilingual education, according to Kirchner (2014) cited in Yiu (2015), offers equal access to the regular school curriculum through team teaching between a regular teacher and a specialist teacher of the deaf. Tang (2016) concurs that sign bilingual education in a regular school setting supports both DHH and hearing students to access the same regular curriculum. A study by Lange et al. (2013) confirmed that with time, deaf students educated through sign bilingual education outperformed the comparison group which was primarily comprised of hearing students. Of note is the finding of the study that suggests that students in the sign bilingual education programme appeared to break through the often discussed plateau where the academic growth of deaf students of hearing parents is stymied resulting in stagnant growth. According to Hsing (2015), although sign bilingual education has been supported by theories in Northern Europe, there are still few studies that have been conducted to support its practical execution in inclusive settings. The few that are available often had a small number of participants making generalisability difficult (Lange et al., 2013). Levesque et al. (2014) and Swanwick (2016) confirm that research into sign bilingual education is often in form of small-groups or case studies. These revelations corroborate Cawthon's (2001) earlier assertion that most studies on sign bilingual education are case histories, tracking successes and challenges within a single inclusive classroom. The purpose of this study was to interrogate the extent of awareness of the benefits of sign bilingual education in the education of deaf children among administrators, teachers and deaf children in mainstream schools in Zimbabwe. The study departed from the use of single classroom case studies to include 10 of the few schools that use sign bilingual education in Zimbabwe.

5. Materials and methods

The current study is premised on the philosophy of pragmatism which assumes that knowledge has an element of instrumentality, that truth is tentative and changing and that reality is investigated with the ultimate goal to improve human life (Everest, 2014). Thus, pragmatism was chosen for this study because it values both objective and subjective knowledge, focuses on what works and utilizes diverse approaches while challenging claims by methodological purists that quantitative and qualitative methods are incompatible (Fiorini et al., 2016; Hanson et al., 2005). Guided by the philosophical paradigm of pragmatism, the researcher opted for the mixed methods research approach. Creswell et al. (2011) identify pragmatism as the central paradigm in mixed methods. The mixed methods research approach enabled collection and analysis of both quantitative and qualitative data in a single study in which the data were collected sequentially and integrated (Creswell et al., 2003; Tashakkori and Teddie, 2008; Imran and Yusoff, 2015; Fiorini et al., 2016) to provide a complete picture of the awareness of the benefits of sign bilingual education in the education of deaf children in mainstream inclusive schools in Zimbabwe. The sequential explanatory mixed method design used in this study allowed for partial integration of data and for inferences to be drawn across both of the methodological research stages (Bleisch et al., 2010). It turned out to be relatively straight forward due to its clear, distinct stages as proposed by Terrell (2012).

The study targeted all administrators, teachers and deaf children in the few mainstream schools that used sign bilingual education in Zimbabwe. For the quantitative phase of the study, a sample of 30 administrators, 100 teachers and 30 deaf children drawn from 10 mainstream schools that used sign bilingual education in Bulawayo Metropolitan Province was constituted using random sampling. Bulawayo Metropolitan Province is the second largest city in Zimbabwe and has the highest number of such schools after Harare. A separate questionnaire was used for each category of the sample to collect data which were analysed via the Statistical Package for Social Sciences (SPSS). Purposive sampling was then used to obtain typical participants in which one administrator per school was engaged in a personal face to face interview and 6 teachers per school in a focused group interview (FGI) to collect qualitative data based on themes that emerged from the quantitative results. Interviews were conducted to a point of data saturation.

6. Results and discussion

The quantitative results of the study are presented and analysed ahead of the qualitative results. To obtain an in-depth understanding of the awareness of the benefits of sign bilingual education from the point of view of administrators, teachers and deaf children, the two phases of the results are then integrated.

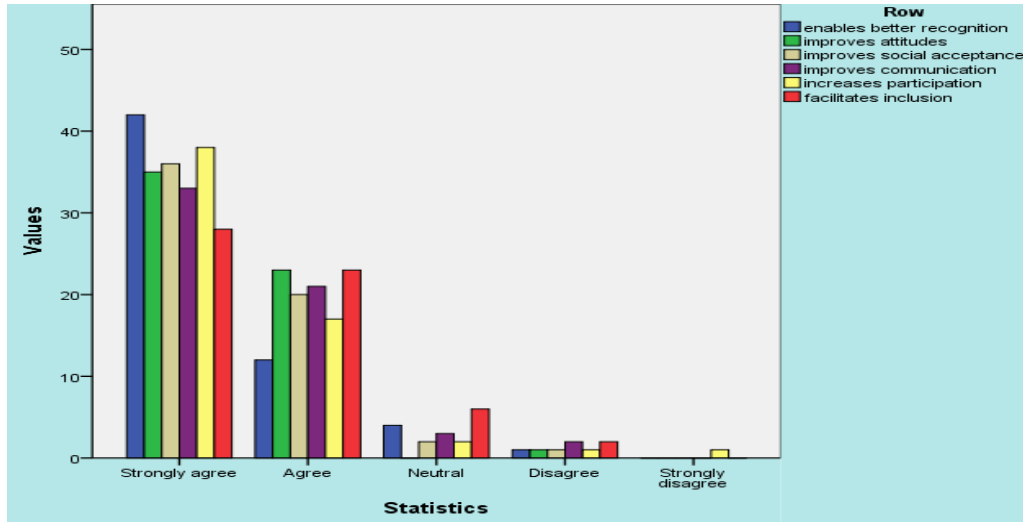


Fig. 1. Teacher cited benefits of sign bilingual education.

Most of the teachers were generally aware of the many benefits of sign bilingual education cited in literature (Hsing, 2015; Marschark, 2012; Swanwick et al., 2016; Yiu, 2015; Tang, 2016; Humphries, 2013; Mitchner, 2015; WFD, 2016). The most pronounced benefits of sign bilingual education are that it enables better recognition of deaf children (56%), increases participation (56%), improves social acceptance (56%), improves attitudes toward deaf children (58%), facilitates communication (56%) and hence enhances or facilitates inclusion (50%) of deaf children in mainstream schools. These benefits of using sign bilingual education as a strategy for inclusion were also confirmed by the administrators and the deaf children themselves as depicted in Figures 2 and 3 respectively.

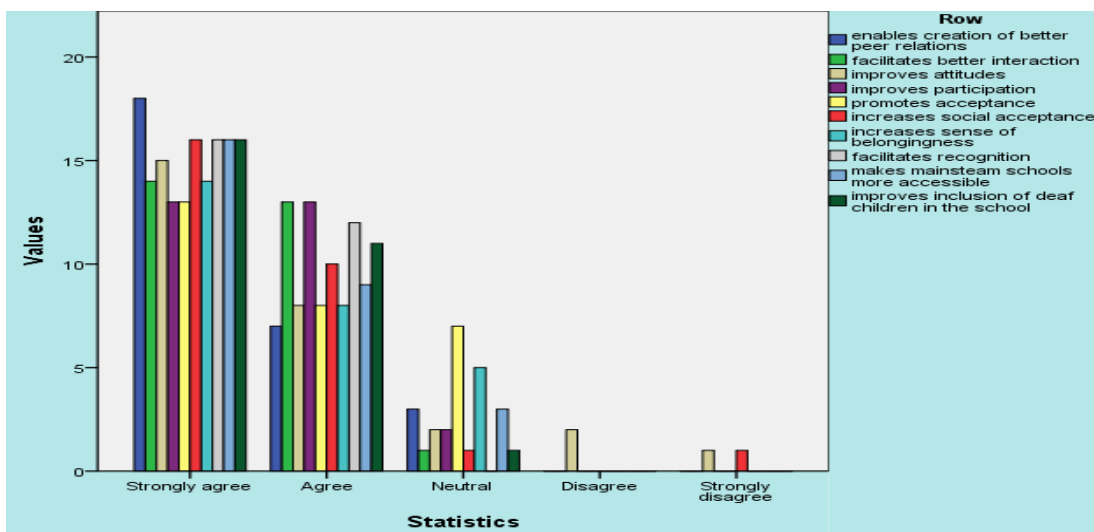


Fig. 2. Administrator cited benefits of sign bilingual education.

According to the administrators, generally all the benefits of sign bilingual education in the education of deaf children in mainstream schools which were cited by teachers apply. Twenty-four out of the 29 administrators who

completed and returned the questionnaire were of the opinion that sign bilingual education enabled creation of better peer relations, 26 agreed that it increased classroom participation, 27 said that it facilitates social acceptance and the same number agreed that it improves interaction in the classroom. Twenty-three of the administrators said that sign bilingual education as a strategy for inclusion improves attitudes toward the deaf children in mainstream schools while 20 agreed that it promotes social acceptance and 21 believed it created a sense of belongingness among deaf children. All the 29 administrators agreed that sign bilingual education led to the recognition of deaf children and that it resulted in the inclusion of deaf children into mainstream schools.

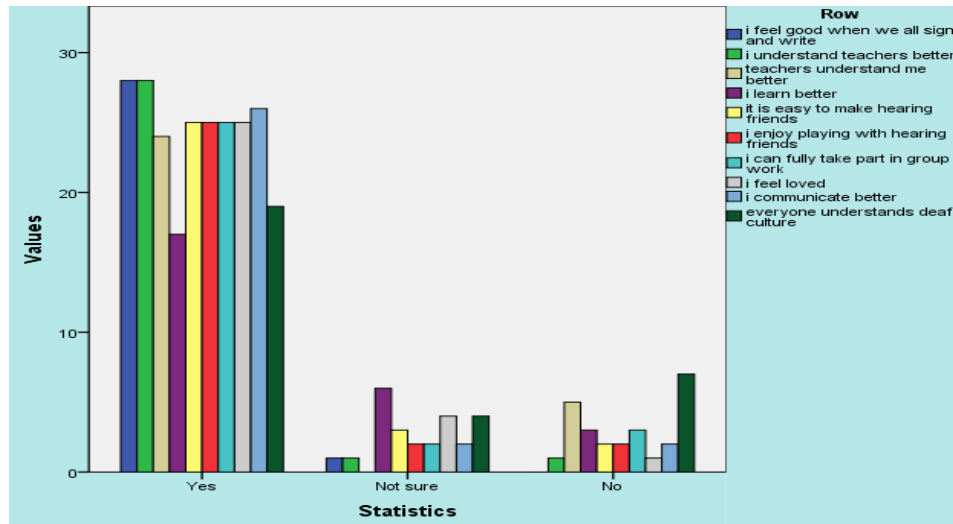


Fig. 3. Deaf children cited benefits of sign bilingual education.

It was critical for this study to obtain the views of deaf children themselves about the benefits of sign bilingual education as a strategy for their inclusion. None of the previous studies on sign bilingual education which this researcher came across ever directly engaged deaf children over their awareness of the benefits of sign bilingual education. Twenty-eight of the 30 deaf children who participated in the study said ‘Yes’ sign bilingual made them feel good and made them understand their teachers better. Meanwhile, 27 out of 30 deaf children confirmed that they could perform better with sign bilingual education while 26 deaf children in each case indicated that with sign bilingual education it was easy to make hearing friends, it was enjoyable playing with hearing friends, it was possible to fully take part in group work and to feel loved and accepted. Twenty-five of the children believed that the teacher understood them better when sign bilingual education was used while 18 thought that it enabled everyone to understand Deaf culture yet 16 said they learnt better with the use of sign bilingual education. In effect, the deaf children corroborated the results from both the teachers and the administrators that sign bilingual education does facilitate their inclusion in mainstream schools. These findings are consistent with the benefits of sign bilingual education reported by earlier studies in countries such as Scandinavia, UK, USA and Hong Kong. According to the studies, sign bilingual education optimizes cultural interchanges by facilitating social interaction and enabling robust and frequent peer interactions that enhance social development, social learning and inclusion (Humphries, 2013). It facilitates classroom participation for the deaf (Mitchner, 2015; Tang, 2016) since it promotes direct communication between the deaf and hearing children and encourages development of both languages (WFD, 2016). In other countries, sign bilingual education has been accepted because of its cultural flexibility (Hsing, 2015), its ability to provide best opportunities for deaf children to achieve social inclusion (Marschark, 2012; Swanwick et al., 2016).

In the qualitative phase of the study, the following themes which emerged during the quantitative phase were pursued in more detail: Attitudes, communication, participation, acceptance, tolerance and belongingness. Regarding attitudes one administrator commented, ‘Sign bilingual education has great benefits.... It is a very good strategy for ensuring inclusivity of deaf children. You see, even the attitude of mainstream teachers towards these children (deaf children) have greatly improved. When sign bilingual education is used, these teachers are able to accommodate them (deaf children)’. From this excerpt, one benefit of sign bilingual education which the administrators showed awareness of is the changing of attitudes towards deaf children from being negative to

being positive. Thus they were alive to the realisation that, sign bilingual education has enabled teachers and hearing children to appreciate communicative abilities of the deaf children. A specialist teacher also argued, 'With the practice of sign bilingual education everybody comes to realize that communication with deaf children is possible. I think this is the only practical way of achieving inclusion of deaf children which had been elusive for a long time in Zimbabwean mainstream classes'. There is also evidence that like specialist teachers, administrators, were generally conscious that if it could facilitate communication, then sign bilingual education could enable full participation of deaf children in all school activities.

An administrator said, 'Sign bilingual education enables participation of deaf children even in other outdoor educational activities such as sport and the Arts Festivals that are part of the new curriculum as you may know'. This implies that administrators were also aware that sign bilingual education empowers deaf children to expose their talents in the same manner as their hearing peers are able to do. They argued that sign bilingual education increases the extent to which deaf children can take charge of their learning and become equal partners in the learning process. Yet another administrator elaborated 'With the practice of sign bilingual education, hearing teachers and children come to realize that after all, there is a way in which to communicate with deaf children and that it is possible to teach them and to learn with them and so on'. Even deaf children themselves confirmed that they felt loved and accepted when sign bilingualism was used. One senior deaf student expressed the following through use of sign bilingual skills: 'How boring it is when people talk, talk and when they know pretty well that you are deaf. But when they sign and write I am happy, I understand and I see that they recognize me as part of them'. The deaf children actually confirmed that when sign bilingual education is used by all, they are enabled to communicate their needs and participate in all school activities. They even claimed that they understood instruction better and that they performed better at the school work. Thus the deaf children themselves were aware that sign bilingual education has both social (communication and participation) and academic (school performance) benefits among others. This was further corroborated by one specialist teacher who asserted, 'In subjects where the mainstream teachers fully cooperate in the use of sign bilingual skills, my children have actually improved significantly. I wish I could bring that evidence to this meeting...' Previous studies have been testimony to these claims anyway. Tang (2016) found that sign bilingual education in a regular school setting supports both DHH and hearing students to access the same regular curriculum there by increasing competitiveness in the academic performance of the deaf learners. A study by Lange et al. (2013) actually confirmed that with time, deaf students educated through sign bilingual education outperformed the comparison group which was primarily comprised of hearing students. Of note is the finding of the study that suggests that students in the sign bilingual education programme appeared to break through the often discussed plateau where the academic growth of deaf students of hearing parents is stymied resulting in stagnant growth.

One can deduct from the excerpts that there is awareness among administrators, teachers and deaf children in mainstream schools which use sign bilingual education that the benefits of sign bilingual education in education of deaf children in inclusive mainstream schools in Zimbabwe include improved communication, interaction, participation, social acceptance, tolerance, belongingness hence inclusivity. It also appears from the data that teachers and deaf children in particular were aware of the potential of sign bilingual education to contribute towards the improvement of academic performance. The results are generally expositive of the fact that sign bilingual education in Zimbabwe made hearing teachers and children realize that it is possible to communicate and interact with deaf children after all. Another finding is that sign bilingual education leads to positive attitudes towards deaf children in mainstream schools as evidence by the consciousness levels among the participants. Data further suggest that sign bilingual education is known to lead to a decrease in frustrations often experienced by deaf children in mainstream classrooms in Zimbabwe. According to the results, sign bilingual education also facilitates better social acceptance and improved tolerance and classroom participation of deaf children. The issue of tolerance and belongingness were confirmed by deaf children who unanimously expressed that they felt more secure and confident when sign bilingual education was used. Many of these benefits were also noted in previous studies (Swanwick et al., 2016; Knoors and Marschark, 2012) which demonstrated that sign bilingual education provides the best possible opportunities for the deaf children to achieve social inclusion, educational access and personal success hence making it logical to be located within the context of inclusion

Integrated results from both the quantitative and qualitative phases of this mixed methods study maintained that participants were general alive to the major benefits of sign bilingual education which are increased social acceptance, peer interaction and classroom participation. The integrated results further asserted that sign bilingual education leads to better communication and positive attitudes towards deaf children. Unique to this study was

that sign bilingual education leads to engendered tolerance and social development and generates a sense of belongingness for deaf children. Both phases consequently confirmed that sign bilingual education facilitates the inclusion of deaf children in mainstream schools. These benefits were articulated by administrators and teachers and confirmed by the deaf children themselves. For the deaf children, their awareness of the benefits of sign bilingual education was further resonated through their preference of it. Such awareness pays tribute to literature that suggests that deaf people actually prefer sign bilingual education due to its benefits that promise to break the long standing barriers to their inclusivity. For WFD (2011), the potential benefits of sign bilingual education have made it a preferred and popular educational strategy for inclusion even among Deaf communities. This is despite that it was not all the administrators and the teachers who were fully articulate of these benefits. Some of the administrators were either unaware or doubtful of these benefits. This was expected considering that the practice of sign bilingual education was relatively new yet not widely expressed in policy and curricula practices in Zimbabwe. However, from the data, it was possible for the researchers to draw conclusions reflecting on the existing awareness and to proffer recommendations that would intensify and spread this awareness to all relevant stakeholders in sign bilingual education in the country.

7. Conclusion

From these results, the study concluded that administrators, teachers and deaf children in mainstream schools that used sign bilingual education in Zimbabwe were aware of the benefits of sign bilingual education in the education of deaf children. The study further concluded that this awareness enabled prospects for a more effective and engendered sign bilingual education in the country. As a result, the study recommended further studies of greater dimension on sign bilingual education and proposed a functional framework that could be adopted by Zimbabwe in order to fully realise the said benefits. The framework which calls for early exposure, multi-stakeholder participation, respect for Deaf and hearing cultures and equality of status between sign and spoken language is presented in Fig. 4. To be operational, this framework should be transformed into a sign bilingual policy in the country.

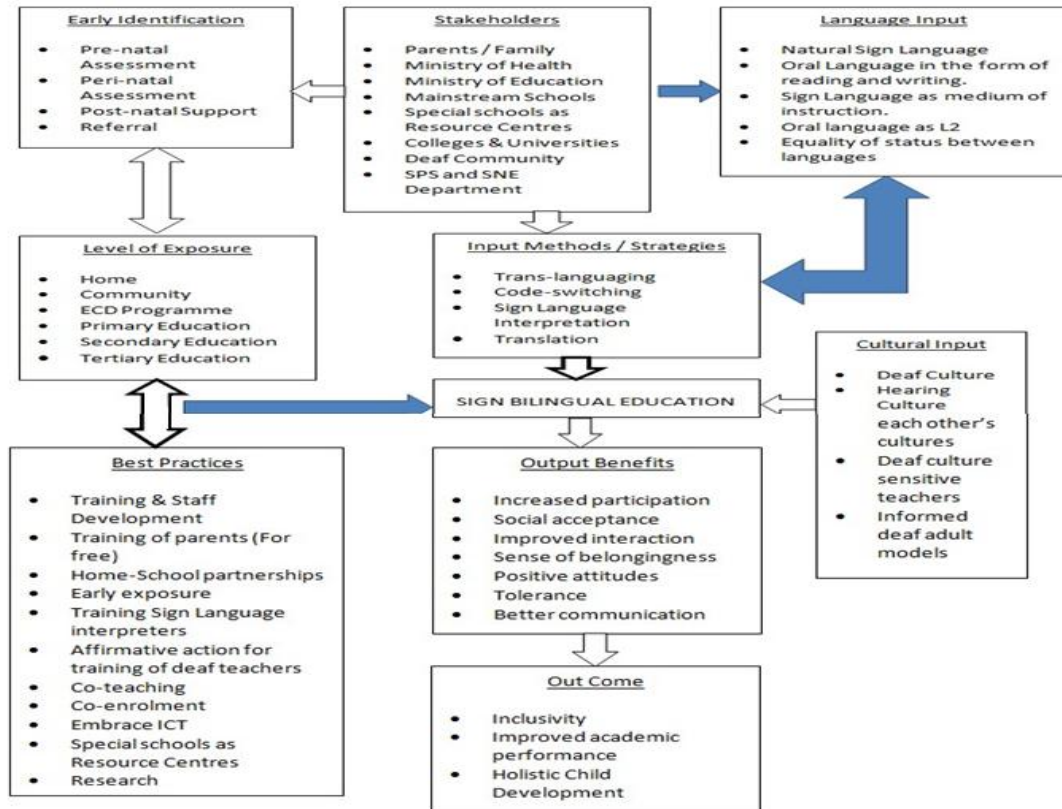


Fig. 4. Sibanda's (2018) framework for SBE as a strategy for inclusion in Zimbabwe.

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