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Academic and Social Conditions of Deaf Children in Inclusive Educational Setting: The Case of Selected Primary Schools of North Gondar Zone, Ethiopia

Getachew Walelign(MED) Muluken Ayalew(MA)
Debre Tabor University, Faculty of Social Science and the Humanity, Special Needs and Inclusive Education Department

Abstract
The general objective of this study was to assess the social and academic conditions of children who are deaf in inclusive educational setting. The study was conducted in three primary schools of North Gondar Zone such as Serko, Chuhit and Limatber. The participants of the study were deaf children, their hearing peers, special needs education teachers and school principals .12 deaf children, 5 special needs teachers, 6 school principals and 5 hearing children were the informants of the study. Interview, observation, focus group discussion (FGD), informal talks and document review were the data gathering instruments. The data collected through different instruments were analyzed qualitatively. The results revealed that the educational condition of deaf children found to be mixed; that is some respondents confirmed that the academic abilities and achievements of deaf children were better than their hearing classmates. On the other hand, the findings showed that that there are deaf children who perform low in their academic abilities and achievements as compared to their hearing equals. Therefore, the result showed that there was no significant difference between deaf children and that of their hearing peer with regard to academic abilities and achievement. With regard to the social relation of deaf children with their deaf equals, hearing peers and teachers, it was found out that they had better social interaction/ relations with all these groups of people both in and out of the classroom. Provision of inclusive education by unqualified teachers; lack of classroom and attention to inclusive education; lack of continuous professional development trainings regarding inclusive education and sign language were identified as major bottlenecks with respect to the implementation of inclusive education on deaf children in the school. Recommendations forwarded include: the professional capacity of special needs education teachers should be enhanced by the schools using series on the job trainings; the school should work more on sign language training and awareness raising trainings.
Keywords: Academic and social condition, inclusive educational setting, deaf children

INTRTODUCTION

The residential schools, special schools, special classes and integration have been used respectively as educational modalities for the provision of special education (Gearhart, 1992). However, inclusive education is a recent educational modality all over the world as well as in Ethiopia when we compared to the above educational modalities. It refers to all students attend and are welcomed by their neighborhood schools in age-appropriate, regular classes and are supported to learn, contribute and participate in all aspects of the life of the school.(Tirussew,2005). Due to having low access and opportunity to education, in Ethiopia scholars in the area and governmental bodies suggest and accept the implementation of inclusive education to provide equal opportunity for all students with and without special needs including deaf children. For example, in Ethiopian context, in the education and training policy 1994, growth and transformation plan (I and II) and ESDP V now leads a national plan and implementation in the education sector and highlights inclusive education as a priority, with the goal: "to provide all children with access education for school. Enrolment rate of children with special educational needs will increase from 4% to 75 %(MOE, 2015).

There is special emphasis on educational, social and moral issues related to children with special needs including deaf who are being educated in regular schools. However, there are public debate and discourse among the stakeholders, policy makers, professionals, teachers, community-based rehabilitation workers and non-governmental organizations regarding inclusive education on deaf children (Tirusew, 2005; MOE, 2015). This clearly shows that inclusion of deaf students needs into regular primary schools is a focal point of debate in education systems across the world. Those who advocate inclusion cite better academic performance and social development for students who are deaf. On the other hand, other studies have reported that the academic and social condition seems to be one of the major challenges for deaf children in inclusive educational settings.

Statement of the Problem

Researchers do not reach an agreement on the social and academic conditions of deaf children in inclusive educational settings. This controversy clearly shows, it needs further research to determine the academic and social condition of deaf children in inclusive classroom. Thus, the researchers tries to see the social and academic conditions of deaf children in inclusive classroom. This in turn helps to come up information which may helpful

for designing better academic and social interventions services for the schooling of deaf children in inclusive classroom and provide information to practitioners in order to build inclusive school culture and society.

Significant of the Study

The finding of this study is believed to be significant:

- To inform teachers, parents, school principals and professionals in the field of special needs about the social and academic condition of deaf children in the inclusive settings.
- Inform concerned bodies (teachers, principals and special needs education professionals) about the challenges that affect the social and academic development of the children in the teaching-learning process at the inclusive classroom.
- Inform the school personnel and special needs teachers about how to improve their knowledge and skills of assisting children in order to scale up the social, academic and communication condition of deaf children in the inclusive classroom.
- It could also suggest valuable recommendations on intervention needed to enhance the language, social and academic development of children who are deaf.
- Suggest the possible measures needed to solve the encountered problem and scale up the practices of inclusive education, the social as well as the academic achievements of children who are deaf.
- Finally, this study is used as a spring board for further research who is interested to conduct on the area.

Objective of the Study

The general objective of this study is to assess the social and academic conditions of children who are deaf in inclusive educational setting. More specifically it attempted:

- ✓ To assess the social relations of deaf children with their deaf & hearing peers and their teachers
- ✓ To examine their academic abilities and achievements across different subject areas in comparison with their hearing peers.
- ✓ To find out those challenges that affect the children's academic performances and social interactions.

Research Question

This research is expected to answer the following leading questions.

1. Do children who are deaf form social relations with deaf children, hearing peers and their teachers across different activities?
2. Are the academic abilities and achievements of children who are deaf different from their hearing peers?
3. What challenges deaf children have faced in their social interactions and academic performances?

Delimitation of the Study

The scope of the study is also delimited to only deaf students. The studded variables are educational & social conditions, mode of communications of children who are deaf and challenges of inclusion on the academic performance and social relation of the children with others. In addition, the social condition is delimited only deaf children's interaction/ relations with their peers (deaf and hearing) and teachers across different activities.

Description of the Study Area

The study was conducted in the three selected primary schools of North Gondar zone. These are: Serako, Chuhit and Limatber primary schools and the study was conducted from Ianaury.2016 to August, 2017.

Review of Related Literature

The Social Interaction of Deaf Children in Inclusive Educational Setting

Stinson and Antia (1999) define social integration is the ability to interact with make friends with and accepted by peers. That is, hearing impaired students communicate in ways that are different from those around them and this can slow down their social interaction and development.

In inclusive classroom, a social constrictive of learning and teaching that requires students in the classroom to interact with one another and the teacher may best promote learning and consistent with a focus on membership. Trussew (2005) indicated that hearing impaired students can learn socialization from their peers, siblings, and teachers, but the value of socialization depends on the feelings person interacting towards the disabled person. Haward and Orlansky (1988) also noted that most hearing impaired people are fully capable of developing positive relationship with hearing peers when a satisfactory method of communication can be used. Supporting this, Bunch, (1994) also indicated that deaf students have a better social skills and academic performances in inclusive classroom settings. Thus, studies have reported satisfactory out comes for academic progress and social

development of deaf students including positive attitudes towards and acceptance of deaf students in their hearing peers.

On the contrary, other researcher found out the poor social relations of deaf children in an inclusive classroom. Most deaf children are educated in mainstream settings where social integration is one of the major challenges for these children**.** For instance. Nisuh (2008) indicated that one of the huge challenges of hearing impaired students in inclusive classroom setting is managing students with a wide range of individual differences with social and academic disabilities. They often have few friends, have less interaction with hearing peers, and are more often rejected or neglected than their hearing peers (Stinson &Antia, 1999). Bench (1992) indicated that several social and emotional problems have been identified with deaf individuals. Children with different degrees of peer acceptance, social competence, and friendship relations have been found to show differences in their behavioral development.

Hence the social condition of children who are deaf is still a controversial issue. That is, some research findings pointed out that deaf child in inclusive classroom have a positive social interaction with hearing and non-hearing impaired children, teachers and school communities; easily accepted by their peers and have an ability to make friends; however; some research findings indicated deaf children have low interaction, unable to make friends and rejected by their peers.

Academic Achievement of Deaf children in Inclusive Classroom

Heward (2009) remarked that research on the academic achievement of students with special needs including children with hearing impairment in inclusive settings indicated mixed results. For instance, some investigations reported better learning outcomes for students with special needs in inclusive regular classrooms than in pull-out programs. On the contrary, other studies reported disappointing performance results (e.g., Schumm, Moody, & Vaughn, 2000) as cited by Keung, (2011), concerns about inadequate instruction, and teachers' insufficient understanding of the learning needs of students with special needs. .

Ultimate goal of inclusive education for hearing impaired is to provide access to inclusive education and the opportunity to become accepted and productive member of the society. These lead children to have better academic and social capabilities**.** There are many successful individuals who are deaf or hard of hearing who are performing a better academic achievement (Luckner and Muir, 2001 as cited in Abebe, 2000). Despite advances and efforts to improve the outcomes of students with hearing impairments, evidence suggests that these students continue to lag behind their general education peers in academic achievement (Traxler, 2000; Antia, Jones, Reed, and Kreimeyer, 2009).

For instance, Biggs (2004) pointed that the academic performance of deaf children falls well behind that of their hearing counter parts in the mainstreaming/inclusive school. We further noted that with poor speech intelligibility and with lip reading skills, no communication abilities with their teacher; children with deafness have poor academic performances. Most deaf children leave school, regardless of whether attended deaf or mainstreaming schools, with an academic achievement well below that of their hearing peers, and inability to communicate fluently in any language, be it sign language, oral or written (ibid). Poor education translates in to poor job prospects and subsequently a lower standard of life.

In spite of the achieved progress, the field of deaf education has been full of bitter controversy and conflict and the educational achievement is said to be far below what it should be. As a result the best educational method and placement option is a matter of debate for those who are deaf and by professional educators. It is believed that hearing impaired children deserve to be placed in an environment where they can communicate with peers and meet their academic, social, emotional and cultural needs.

Research Method

Research Design

A qualitative case study design is used for this study. The qualitative method is chosen for this study, because of the characteristics of the research questions and objectives. Qualitative research design originated in the social and behavioral sciences: sociology, anthropology and psychology. This method is also widely applicable especially on research that is conducted on special needs (Hartley, 2003).

Target Population, Sample and Sampling Techniques

The participants of the study were deaf children, their hearing peers, special needs education teachers and school principals. The total numbers of deaf children who are attending their education in these schools at different grade levels were 35 (15 from Serko, 11 from Chuhit and 9 from Limatberprimary). Out of these, 26 students (10 from Serako, 9 from Chuhit and 7 from Limatber) have been attending their education in the inclusive classroom. The remaining 9 deaf students have been attending in special classes/unit. After they reach grade three, they become mainstreamed with the so called "normal" students in the regular classroom. Of these, 12 students (5, 4, 3 Serako, Limatber and Chuhit respectively) who have an ability to express their ideas through sign language or written were

the informants of the study.

Among the ten special needs education teachers, 5 (3, 1, 1Serako, Limatber and Chuhit respectively) who have been teaching deaf children for five and above years were the participant of the study for interview. This is because; the researchers believed that these teachers have a better knowledge and experiences to provide reliable and sufficient information about the social and academic condition of deaf children in inclusive educational setting. There are six school principals including vices, all these principals were the informant of the study for interview and informal talk. Furthermore, five hearing children were participated in interview and seven for FGD. Therefore, deaf children and special needs education teachers were selected using purposive sampling techniques. Children's hearing peers were selected by using snow ball sampling techniques

Data Gathering Instruments

To obtain valid and reliable data for the study, five methods of data collection instruments were used to get rich information from different sources and for the purpose of triangulation. These include interview, observation, focus group discussion (FGD), informal talks and document review. Interview was the main data gathering instrument.

Data Gathering Procedures

Data was collected in collaboration with different individuals: special needs education teachers, sign language translators, school principals, deaf and hearing children. Interview and FGD questions were prepared in Amharic language and translated in to sign language during the interview and discussion by sign language experts. FGD was undertaken in their own school. The 2nd semester continuous assessment results of deaf children and their classmates at various grade level was collected from record office.

Methods of Data Analysis

The data collected through different instruments like interview, observation, document review, FGD and informal talks were analyzed qualitatively. Before the data analysis, the information that obtained from the above sources were classified and organized by themes. The researchers were used cross case data analysis method. The academic achievements of deaf children were compared with the minimum pass mark (50%) and with the academic results of their hearing equals (criteria and norm references respectively).

Ethical Consideration

Before gathering data from deaf children, their peers, teachers and school principals, the researchers asked permissions from the schools and the above informants. In addition; the participants told to them the significance and the purpose of the study. The researchers also considered the child's privacy right not to give information. Furthermore, the researchers promised to the participants that the information collected were used for only research purposes and confidentiality was kept. Pseudonyms were used instead of using their real names during the data analysis.

Analysis and Finding of the Study

Background Information of Informants

The background of deaf and hearing children, their teachers and school principals were presented below.

Background of Deaf Children who participated in the Research

Table 2: The following table shows the background information of deaf children who were attended in the interview and FGD

No.	*Name*	*Sex*	*School*	*Grade level*	*Educational modality during grade 1 to 3*
1	Tariku	M	Serako	6	Special unit
2	Almaz	F	Serako	5	Special unit
3	Adisu	M	Serako	5	Special unit
4	Koset	F	Serako	5	Special unit
5	Abdela	M	Serako	7	Special unit
6	Sinke	F	Chuahit	8	Special unit
7	Zerihun	M	Chuahit	5	Inclusive
8	Senit	F	Chuahit	5	Inclusive
9	Takila	F	Chuahit	7	Special unit
10	Aster	F	Limatber	6	Integration
11	Tamralech	F	Limatber	6	Integration
12	Amare	M	Limatber	6	Integration

Note: *These names are pseudonyms*

Deaf children who attended their education in inclusive/ mainstreaming classroom were from the three schools and have been placing at different grade levels. In addition, they attended their lower grades education in

different educational modalities. Most deaf children have got the opportunity to attend their lower grade education in special class modality However, previously, children with special needs (especially sensory impairment and intellectual disability) have been attended their education in inclusive educational approach starting from grade one.

Background of Interviewees' Teacher

Table 3: The following table shows the background information of interviewed special needs and inclusive education teachers

NO.	Name	Sex	*School*	*Educational level/status*	*No. of service in years*	*Grade level in which they taught*
1	Maritu	F	Serako	10+3 in SNE	17	1-3 in special unit
2	Desta	F	Serako	10+3 ”	12	” and inclusive
3	Salam	F	Serako	10+3 ”	17	‘ and inclusive
4	Tamiru	*M*	Chuahit	10+4 ”	13	1-3 special unit
5	Almaz	*F*	Limatber	10+3 ”	12	1-3 special unit

Note: *These names are pseudonyms*

The above table indicates, except one, most teachers who have been teaching students with special needs are Diploma holders in Special Needs Education. In addition, all teachers have 12 and above years of teaching experiences in teaching children with and without hearing impairment. This helps the participants to provide genuine and valid data about the conditions of deaf children in inclusive educational setting.

Background of School Principals

Table 4: The following table shows the background information of school directors

NO.	Name	Sex	*Educational Background*	*Position*	*Experience(in years)*	*School*
1	Case 1	M	10+4 , 1st degree	Director	16	Serako
2	Case 2	M	10+3, diploma	V/director	17	Serako
3	Case 3	M	10+4, 1st degree	Director	29	Chahit
4	*Case 4*	*M*	10+3, diploma	V/director	27	Chuahit
5	*Case 5*	*M*	10+4, 1st degree	Director	15	Limatber
6	Case 6	*M*	10+3, diploma	V director	11	Limatber

Note that names used to represent the directors are pseudonyms

As the above table depicted, the main and vice directors have above 11 years of experiences in teaching and as a school principals. This long work experiences help the directors to provide reliable and genuine information about the situation of inclusive education on deaf children.

4.1.4. The Background Information of Hearing Interviewees

Table 5: The following table clearly shows the background information of hearing children

NO.	Name	Sex	*School*	*Educational level/status*	Relations with the deaf children
1	Slenat	F	Serako	4	Intimate friend
2	Anmut	M	Chuahit	7	Classmate
3	Bisrat	M	Limatber	6	Classmate and intimate friend
4	Sinke	*M*	Limatber	6	Classmate
5	Kasech	F	Limatber	6	Classmate

Note: All these names are pseudonyms

All these interviewed children were the classmate or /and an intimate friends of the informant deaf children across different grade levels. This relations helps the children to provide sufficient and reliable information about the conditions of deaf children in inclusive educational setting.

Social Relation /Interaction of Deaf Children With:

A. Deaf Peers

The researchers asked the children about their social relationships with their deaf peers. Almost all deaf children responded that they had a good social relationship with their deaf equals. For instance Senit responded:

When I was at home, I only played with my families. I did not get even deaf children in my neighbor. Due to this reason, I didn't get the opportunities to play and interact with them. My hearing age mates also considered me as a foolish (እኔን እንደማኝ ነ ወየ ማ ዋዩኝ).In this regard, sometimes they showed aggressive behaviors like throwing stone to me and ridiculing. However, when I entered school, I

found deaf age mate and since then I was not seen as a strange there. In my class, everybody gave me love and affection. In addition, I easily interact with deaf children more than that of hearing peers. Thus, I feel I am glad more if I were with them.

AtoTamiru, the teacher of Zerihun,Senit and Takila also explained as follow:

በእረፍትጊዜመቀማቀየሚችሉተማሪዎችመስማትየሚፈልጉትከሁሉምጋርበሆንምብዙትግንመቀማቀከሚችሉትጋርነው፡ በአብዛኛውትምህርትቤትሲሄዱናሲመጡእንኳንብናይመቀማቀየሚችሉትልጆችመቀማቀከሚችሉትጓደኞቻቸውጋርነው፡ ይህየሚያሳየውመቀማቀየሚችሉልጆችመቀማቀከሚችሉትእኩዮቻቸውጋርየጠበቀማህበራዊግንኙነትእንዳላቸውነው፡

(Even if deaf children interact with all children at the recess time, mostly deaf children are more interested to play with their deaf mates. They even more tend to go and back to school with their deaf equals. This shows that deaf children had a better social relationship and interaction with the deaf children than the hearing ones).

In addition, most deaf children during the interview and hearing children during the informal discussion disclosed that even if deaf children form social relations with the deaf and hearing children, they had better interactions with their deaf mates. Similarly, our observation in the classroom assured that deaf students in the classroom were sit with their deaf classmates and discuss with each other across different activities than their hearing peers. Their classroom teacher also explained that most deaf children did not had an interest to work, play and discuss with hearing students. This is because, deaf student have an ability to communicate with their deaf equals through sign language and informal menses.

On the other hand, some respondents during the interview stated that deaf children could interact with both deaf and hearing peers. Supporting this idea, for instance, Bisrat (their hearing peer) during the interview explained that deaf children have an ability to play, discuss and interact with both hearing and deaf children. They further emphasized that hearing children could easily accept the deaf as the hearing peers during the play and extracurricular activities. Case 4 also mentioned that those deaf students who have better communication skills had better social relation than those who had poor communication skills.

All these data assured that deaf children are more interested to form friendship with their age mate and more interested to form social relations with deaf peers than the hearing ones.

B. Hearing Children

The researchers inquired the participants about the social relation/ interaction that deaf children had with their hearing peers. All participants responded that deaf children have an excellent social relations with the hearing peers. For example, during interview teacher Maritu, explained:

ከኛትምህርት ቤት ልዩነ ትን መሰረት በማድረግ የሚለል የለም፡ ሁሉምየትምህርት ቤቱ ተማሪዎች ጉዳት ያለባቸውን ተማሪዎች እኩል ያያሉ፤ ያቀርባሉ፤ ያስተናግዳሉ፡ በተጨማሪምሁሉምመቀማቀ ችግር ያለባቸውልጆች ከሚችሉምልጆች ጋር አብረውይጫወታሉ ተግባራትን አብረውይሰራሉም(there is no segregation in our school based on differences.

All students in the school see, treat and address the needs of students with disability equally. In addition, *.all deaf children play and work together with others).*

Deaf children in all grade levels were play and interact with hearing peers. For instance, case 1 and case 2 during the interview explained that almost all deaf children not only have an ability to interact, play and discuss with their hearing mates but also show special sign and symptom in order to be accepted by their hearing peers. In connection to this, Salam (special needs teacher) remarked that deaf children were singing, playing and working together with their hearing peers. Deaf children showed love to the hearing peers and the hearing peer also show concern and affection to them especially during their play.

Zerihun further replied:

We/ deaf children/ played together with the hearing children like ሚህረሜ ያያችሁ፣ ነጋአልነጋምወዘተ....

(It is types of play which deaf children are mostly engaged with the hearing peers etc.). This kind of play is more appropriate for female children; however, male deaf children mostly engaged in football game.

Results from observation outside the classroom also showed that especially hearing children have more interest to interact, play and talk with deaf children. However, deaf children were disinterested to interact with the hearing age and classmates. One of the deaf children during the FGD reported that he did not play, talk, discuss and interact with his hearing peers because of communication barriers. In addition, special needs teachers during the interview remarked that those deaf children who have communication skills have a better social skill.

C. Teachers

The researchers asked the informants about how deaf children interact/ form social relation with teachers. Special needs education teachers responded that except the new comer teachers, older teachers took basic sign language skills training. Having taken this training, some teachers could assist deaf students in different activities in and out of the classroom as much they could. As a result, deaf children were able to interact and form social relations with these teachers. Even if, most teachers had taken sign language training in order to assist deaf children, they did not communicate with them, because they forgot the skills, this is in turn because teachers did not get continuous

professional development training.

During the classroom observations, the researchers confirmed that deaf children are easily communicated and interacted with their teachers. Observation made outside the class room also showed that deaf children do not afraid their teachers. They easily interact, talk and share their ideas to their teachers through different means of communications.

Tamralech during the interview replied that she easily interact with her teachers than even with her families. She further elaborated, outside the class room, she played with her teachers like ‹‹}[ƒ }[ƒ እናእንቆቅልሽ›› (This is a type of play which children are engaged in their localities).All these evidences showed that deaf children were easily interact and form social relationship with their teachers across different activities.

The data from the classroom observation showed that teachers were committed to interact with deaf students in the class room as far as they could and they assisted the deaf students in any teaching learning activity in any means of communication.

Academic Achievements and Abilities of Children who are Deaf

The researchers asked the informants about the academic abilities and achievements that deaf children have by comparing with each other and/or with their hearing classmates. We found mixed results. That is, some informants responded that deaf children especially those students who have communication skills have a better academic abilities and achievement than their hearing mates. Whereas, some responded that deaf students have low academic abilities and achievements due to not cognitive limitation but having communication barriers. However, most informants repeatedly explained during the interview, FGD and informal talk, the academic achievement and ability of deaf children is similar to that of hearing mates. They were high, medium and low achievers like that of others. For example, Koset's teacher -w/o Salam explained about Koset's second semester academic results and abilities:

> *She is an outstanding student when compared to her classmates. She stood 1rdin grade four.* She*has better communication skills than other deaf children. This leads her to have a better academic achievement and abilities across all subject areas.*

Other special need teachers also surprisingly responded that deaf children have an interest to learn. They are strongly motivated to learn. They are egger to know everything. This entails some have better academic achievement and ability. Interview results with their hearing peers also indicated that some students have an excellent outstanding performance in some subjects as compared to others. The observation results of their second semester academic score showed that deaf children perform better in some subjects over the others. For example, most students have outstanding abilities in Amharic language subjects than in mathematics. This idea is also supported by Zerihun during the interview:

> *ሀሉንምየትምህርት ኣይነ ት እንደለለቹ ኣቻምቻቸን እኩልእንሚለን፡፡ በተለይ በኣሚኛ ቋንቋ፣ ማህበራዊ ሳይን ስእናበስ ነ ወብትየ ትምህርት ኣይነ ቶች የተሻለ ችሎታና ዉጤት ኣለን፡፡ ነገር ግን በሂሳብና እንግሊዝኛ የትምህርት ኣይነ ቶች ያለን ዉጤትና ችሎታ ኣነ ሰተኛ ነ ው፡ ይህምየ ሆነ በት ምክንያት የተፈጥሮ ሳይንሰና የ ሂሳብ ትምህርቶች ለእኛ ስለሚሰቶዉንና በሚበቀወደረጃ የሚከትቋንቋየ ነ ዚህን የ ትምህርትኣይነ ቶችእንዳንድይዘቶችን መግለጽ ስለሚችል ነ ው፡* *(we learn all the subjects given at school like our equals. Especially, we have a better academic ability and achievement particularly in Amharic language, social studies and Aesthetics subjects. We, however, showed low academic achievement and ability in English and Mathematics subjects. This is due to the fact that natural science subjects are difficult for us and the sign language can't sufficiently express some contents of these subjects.)*

As she also explained, especially those students who have better communication skills have better academic skills and abilities than those deaf who had poor communication skills. During the document analysis (2nd semester continuous assessment), results of most deaf children also showed that most deaf children have faced difficulties to achieve better results in hard science than in social science courses

On the other hand, teacher Maritu explained that the academic achievement and abilities of deaf children is nearly the same as that of the hearing peers. That is, the ability and achievement difference among the deaf children in terms of high, medium and low levels holds true with that of their hearing classmates.

Some informants during the FGD and Interview remarked that the academic abilities and achievement of some deaf children are found to be poor. Especially those students who come from neighboring integrated schools had low academic achievement than that of deaf children who have got the opportunity to attend their education in special class on inclusive educational settings.

Similarly, Case 3 during the interview confirmed that the academic achievement and ability of deaf children is relatively lower than their hearing peers due to communication barriers and unable to attend their education in inclusive or special class in lower grade.

Table 6: Second semester academic results of deaf children and their class highest and lowest score

The following table clearly shows second semester (2008 E.C) academic results of deaf children in different grade levels and score difference between higher and lower result of students in their own grade level

NO.	*Name of students*	*Grade level*	*Semester average*	*Rank*	*Highest score in their respective class*	*Lowest score in their respective class*
1	Tariku	5	57.7	25	89	44.8
2	Almaz	4	72.4	2	81	42.3
3	Adisu	4	63.2	4		
4	Koset	4	81.1	1		
5	Abdela	7	46.2	53	82	43
6	Sinke	7	70.1	18	84	39
7	Zerihun	4	71.2	22	89	44.8
8	Senit	4	83	3		
9	Takila	6	73	7	85	40
10	Abay	6	56.8	44	98.7	45
11	Tringo	6	51.5	55		
12	Bosena	6	52.3	53		
13	Alemu	7	60	28	88.6	36
14	Aster	6	43.5	45	95.7	47.6
15	Tamiralech	6	44.8	43		
16	Amare	6	41.6	44		
17	Asnakew	4	56.5	50	89	46.7

As depicted in the above table, the academic results of deaf children are similar to their 'normal' peers entertaining high, medium and low levels of achievement as compared to their classmate .Put it differently, most deaf children's academic results were above the minimum passing mark while some children's results were found to be below the minimum passing mark (50%).

For instance, Koset scored 81.1 and she stood 1st, Almaz scored 72.4, Senait scored83 and stood 3rd.This implies that there are deaf children who achieve high on the academic performances in their respective classes. In the same classes, it was found out that some "normal" (hearing) children score poor (44.8%), which is below the minimum passing mark.

In the table above, it is also shown that some deaf children scored low in their academic performance as compared to their classmates. For example, Aster, Tamiralech and Amare scored 43.5, 44.8 &41.6 respectively. This result indicates there are some deaf students whose academic achievement is below the minimum standard. We can imagine how these students' score is far from the highest achievers in their respective classes (98.7%).Especially those students who did not attend their education in special units/class or inclusive educational settings in lower grades have poor communication skills and this in turn leads to have poor academic achievement as it is mentioned above by different respondents.

The figures in the above table also portrays almost most deaf children had average academic results as compared to their classmates. Example, Adisu (63.2%) and Alemu(60%) scored medium in relation to the results of their classmates. We can see how their results were compared with the highest and the lowest results in their class (81&42.3 respectively).Similarly, Alemu's class highest and lowest results were: 88.6 & 36 respectively.

Challenges Faced while Implementing Inclusive Education

Information obtained through different data gathering tools pointed out pertinent challenges related to implementing inclusive education. For instance, case 2 pinpointed that provision of inclusive education by unqualified teachers is the major bottleneck to implement inclusive education.

In addition to these, lack of classroom and attention to inclusive education, regular school teachers do not get continuous professional development trainings regarding inclusive education and sign language were identified as major problems imped the implementation of inclusive education for deaf children in the schools.

Case 5 also disclosed that lack of curricular materials and well qualified professionals in the field, poor retention of education on the part of deaf children, awareness and attitudinal barrier of educational officials pertaining to inclusive education and children with disability as major obstacle to practiced inclusive education on deaf children as desired.

Information obtained from special needs education teachers during the interview also indicated that special needs education teachers did not assist deaf students in the mainstreaming classroom. She stressed that those qualified teachers were not motivated to render special support for deaf children even in their free time.

Selam responded;

የክፍል ጠበት ፣ የልዩ ፍላጎት ትምህርት ማህራን እጥረት እና ጉዳት ያለባቸውተማሪዎች በቁጥር አነስተኛ መሆን

የተለያየ የክፍል ደረጃ ያሉ እና እክል ያለባቸው በአንድ ክፍል ውስጥ አደርጎ በተወሰኑ መማሪያን ማስተማር የአካቶ ትምህርትን ለማጎበር በጣም አስቸጋሪ አድርጎታል፡፡ በተጨማሪም መማሪያን በማቆየ ትምህርት እድል አለማግኘት የልዩ ፍላጎት ትምህርት መማሪያን የአካቶ ትምህርትን በትጋት እንዳይተገብሩ እንቅፋት ሆኗል፡፡ (Because of having shortage of classroom, lack of qualified special needs education teachers and limited number of children with different disabilities, different disabled and multi graded children are forced to learn being confined in one classroom. In addition, in ability to get an opportunity for further education related their profession is taken as a major factor that hinder the implementation of inclusive education.)

Tamiru during the interview remarked that the school principals and regular school teachers have a negative attitude towards special needs teachers by under estimating them as if they did not effectively under take teaching activity in inclusive as well as special class. He stresses this point by citing the traditional proverb "**ሞክብ ብዥጣ አብረን በላን**"" (because of lack of different dishes, we eat together,). Having this kind of attitude, special needs teachers are unable to use their time, knowledge and efforts to implement inclusive education on deaf children.

Disagreement between special needs teachers and schools leaders in budget allocation, viewing inclusive education in different perspective and inability to create inclusive environment were identified as a major obstacles in implementing inclusive education in the school.

Discussion

As stated earlier, the purpose of this study was to assess the social and academic condition of deaf children in inclusive educational settings. In this part, the results of the major findings in relation to the research questions and review of related literature were discussed and interpreted. For instance, the educational condition, their social relations, academic achievement and its challenge in inclusive education were discussed.

The result of the study revealed that the educational condition of deaf children found to be mixed; that is some respondents mentioned that the academic abilities and achievements of deaf children were better than their hearing classmates. For instance, w/o Selam explained about the children's second semester academic results and abilities that they showed outstanding ability and academic performance as compared to their classmates. More specifically, there are even some deaf students stood 1rd in their respective grade levels.

In line with this, there are research outcomes which emphasized the better academic ability and achievement of deaf children in relation to hearing peers in inclusive educational settings. For instance, Peter, Luckier and Muir (2001) as cited inAbebe (2000) suggested that there are many successful deaf students who are performing a better academic achievement. This entails deaf children could perform better than their hearing peers in the academic performances in inclusive classroom. Hung (2006) also noted that it is clear that helping the included students in inclusive settings improve their social skill competency one as important as improving the included student's academic performance.

On the other hand, the findings showed that there are deaf children who perform low in their academic abilities and achievements as compared to their hearing mates. In relation to this, Almaz during the interview reported that the academic ability and achievements of some deaf children who did not get the opportunity in attending their education in lower grades in special class/unit or inclusive program had low academic ability and achievement as compared to others. Similarly, Case 3 during the interview confirmed that the academic achievement and ability of deaf children is relatively lower than their hearing peers due to communication barriers. Supporting this, Biggs (2004) pointed that the academic performance of deaf children falls well behind that of their hearing counter parts in the mainstreaming/inclusive school. Furth (1964) as cited by Moors (1996) arrived essentially as the same conclusion. In addition, despite advances and efforts to improve the outcomes of students with hearing impairments, evidence suggests that these students continue to lag behind their general education peers in academic achievement (Traxler 2000; Antia, Jones, Reed, and Kreimeyer 2009).

The finding of this study also showed that there was no significant difference between deaf children and that of their hearing peer with regard to academic abilities. For example, teacher Maritu during the interview explained that the academic achievement and abilities of deaf children is nearly the same as that of the hearing peers. That is, the ability and achievement difference among the deaf children in terms of high, medium and low when we compared to that of their hearing classmates. Their hearing peers and directors during the interview supported this idea that there is no observed difference in academic abilities between deaf children and hearing mates. As they described it in detail, there are some students who perform better, average and poor like other class students. Previous research findings also advocated this finding, for instance, Moors (1996) noted that there is no significant academic difference exist between deaf and hearing impaired children in inclusive classroom. It was reported that no difference has been found between deaf and hearing subjects in academic performance while the linguistic factors presented were with the linguistic experience of the sample deaf children.

With regard to the social relation of deaf children with their deaf equals, it was found out that they had better social interaction/ relations both in and out of the classroom. In relation to this, special needs teachers during the

interview remarked that even if deaf children interact with all children at the recess time, mostly deaf children are more interested to play with their deaf mates. They even more tend to go and back to school with their deaf children. This showed that deaf children had a better social relations/interaction with the deaf children than the hearing ones. Our observation in the classroom assured that deaf students in the classroom were sit with their deaf classmates and discuss with each other across different activities than their hearing peers.

Generally, this indicates deaf children have relatively better social interaction with that of deaf mates. As information obtained from teachers, deaf children are more interact with the deaf children. In relation to this, Moors (1996) noted that deaf people are more interact with deaf people and communicate easily with deaf people. Deaf people are married with deaf people and can easily play and discuss with deaf equals.

The results of this research also identified that deaf children had better interaction with their hearing peers while they play and learn. More specifically, deaf children in all grade levels were play and interact with hearing peers. For instance, teachers and students, school principals during the interview and FGD explained that almost all deaf children not only have an ability to interact, play and discuss with their hearing mates but also show special sign and symptom in order to be accepted by their peers.

This result entails deaf children have a positive social interaction with their hearing mates. Supporting this idea, Haward and Orlansky (1988) noted that most hearing impaired children are fully capable of developing positive relationship with hearing peers when a satisfactory method of communication can be used. Bunch, (1994) also indicated that deaf students have a better social skills in inclusive classroom settings. Thus, studies have reported satisfactory outcomes social development of deaf students including positive attitudes towards and acceptance of deaf students in their hearing peers.

With respect to the social relation of deaf children with their teachers, this finding also indicated that they have improved social relationships with their teachers. In light of this, Tamralech one of the deaf informant during the interview replied that she could easily interact with her teachers than even with her families. The in and out of classroom observations also confirmed that deaf children could easily communicate and socialize with their teachers. They easily interact, talk and share their ideas with their teachers. However, information obtained during the interview with case 4 reveled that most regular teachers were not interacting actively with deaf students as they did for the hearing peers as result poor sign language skills.

In sum, this result implies, most informants responded that most deaf children could interact with their teachers while one informant argued that deaf children couldn't interact with their teacher due to absence of sign language skills. In line with this, other research finding had similar outcome giving due consideration the social interaction of deaf children with their teachers. For instance, Trussew (2005) indicated that hearing impaired students can learn socialization from their peers, siblings, peers and teachers, but the value of socialization depends on the feelings person interacting towards the disabled person.

The other research findings also showed that deaf students who had better communication skills have better social interactions with deaf and hearing children as well as school communities. In relation to this, Bench (1997) described that the social interaction of hearing impaired children could be helped by the communication skills needed to begin and maintain positive interaction and better academic achievement with peers.

The results of the study pin pointed that many drawbacks while schools implement inclusive education on deaf children. It includes, provision of inclusive education by unqualified teachers; lack of classroom and attention to inclusive education; regular school teachers do not get continuous professional development trainings regarding inclusive education and sign language were identified as major bottlenecks with respect to the implementation of inclusive education for deaf children in the schools. In relation to this, Gwala (2006) and Degenetu, (2010 as cited in Getachew, 2011) revealed that educators lack of knowledge, little or no experience about inclusive and deaf education, uncertainty about roles, inadequate training in teaching learners with barriers in learning and development result in a high percentage of educators holding negative attitudes towards inclusion of learners with hearing impaired children in learning into regular classrooms.

The study also identified that lack of support services and curricular materials; negative attitude by school principals and regular school teachers towards the program and special needs teachers were the major pitfalls implementing inclusive education on deaf children. Supporting to these findings, Tirusew, (2005) and Rodda &Eleweke. (2010)) noted that the attitude of the community towards persons with hearing impaired and inclusion is the challenges of practicing inclusive education. A limited understanding of the concept of deafness, negative attitude towards people with disabilities by regular teachers and school principals in general and deaf children in particular and hardened resistance to change are the major barriers impeding inclusive education on deaf children by under estimating them as if they did not effectively undertake teaching activity in inclusive as well as special class. Supporting these findings, some researchers have found that general education teachers were not in favor of inclusion (Coates, 1989 as cited in. Amati, N. M, 2012).

In addition to the aforementioned challenges, the study also identified that regular school teachers had poor sign language skills, using oral dictation during the teaching process, students with special needs attending their education in being crowded in one classroom managed by a single teacher most often were the major challenges

that deter the implementation of inclusive education on deaf children. In relation to this,Antia and Stinson (1999) outlined that the basic problems faced when deaf and hearing students are educated together is lack of mutual access to communication between them and teachers.

Disagreement between special needs teachers and schools leaders and limited number of children with different disabilities also the major setbacks to implement inclusive education.

Conclusions

Based on the findings of the research, the researchers have reached the following conclusions

1. Deaf students have been attending their education in special class/ unit up to grade 3 and after this grade level, they become mainstreamed in the regular classroom. It means, after grade three, they learn with their 'normal' hearing peers in the regular classroom.
2. The academic achievement and abilities of deaf children found to be mixed. That is, some deaf children have better academic achievement and abilities than their classmates. Whereas, some have low achievement and abilities as compared to their hearing classmates. Some deaf children's academic abilities and achievement is average. That is, they are high, low or average achievers like their hearing mates.
3. Deaf children perform better in social science and language subjects than the hard sciences.
4. Communication skill is the major factor that determines the academic abilities & achievement as well as social relations of deaf children in inclusive classroom. That is, those deaf children who have a better communication skills have better academic achievement and social skills.
5. Deaf children could form social relations/ interactions with deaf children, hearing children and their teachers. They are able to discuss, work, play and interact with deaf as well as hearing children. Deaf could interact with deaf children by far better than the hearing one. They used different sign and symptoms to be accepted by their peers.
6. The common challenges faced for the implementation of inclusive education on deaf children are lack of trained professionals in sign language, lack of continuous professional development training about inclusive education and sign language skills. Limited number of classroom and negative attitude of educational officials and principals to inclusive education.

Recommendations

Based on the findings of the study, the following major recommendations were forwarded;

1. The schools should give much emphasis on the implementation of inclusive education on deaf children starting from early grades. This leads deaf children develop good social skills and academic capabilities in their consecutive grades.
2. The professional capacity of special needs education teachers should be enhanced by schools using series on the job trainings in order to scale up their knowledge, sign language skills and experiences about inclusive education. College of teacher education should design relevant curriculum that enable the trainees equipped with knowledge and skills pertaining to inclusive education in general and sign language in particular.
3. The schools should work more on awareness raising trainings. This helps school communities to know about the implementation of inclusive education. This in turn facilitates the inclusion of deaf children. The schools form a link with neighborhood universities and colleges in order to enrich experiences with inclusive education.
4. The school principals should work closely, cooperatively and collaboratively with special needs teachers and students with disabilities. In addition, education officials, NGOs and parents should join their hands with the school community in order to facilitate the education of deaf students.
5. The schools should fulfill the necessary materials like text and reference books in order to raise the communication skills and academic achievement of deaf children.
6. Further research needs to be conducted on the inclusion of all children with disabilities in the schools. Inclusion is not applied with only one type of disability group. All students should benefit from inclusive education and their effects should be assessed.

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