

English as a Second Language Education for the Deaf: To What Extent is Educational Provision Effective in Government Schools in Oman?

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Abstract

Since introducing an inclusive education programme in 2005, the government of Oman has put great efforts into integrating children with disabilities, including deaf children, in the Omani mainstream schools. English is one of the important needs of the impaired children, especially the deaf. Yet, adopting the mainstream curriculum for teaching English to the deaf children has raised numerous problems and challenges for the teachers and the deaf children. This study aimed to examine the challenges faced by the teachers and students in schools adopting the mainstream curriculum in teaching English as a second language to deaf children in Oman. In particular, it sought to understand Omani English teachers' perceptions and responses to the challenges faced by students who are deaf or hard of hearing, how deaf students feel about their English language learning experiences, and what additional training and support is needed to further improve deaf students' English language learning. It made use of questionnaire and interview data, gathered from students and teachers in the Dhofar region of Oman, as well as analysis of teachers' diaries. The quantitative data obtained were analyzed using SmartPLS (version 3), and the interview and diaries data were thematically analyzed. Findings from the qualitative data revealed that while teachers lack training and professional development and are provided with teaching materials and teaching devices that are inadequate, nevertheless the inclusive curriculum is largely relevant, though this varies with class level, and the pedagogy used in teaching English to deaf children is acceptable. The study concludes that deaf children need to be motivated towards learning, while a special curriculum for the deaf children is required, topics in the syllabus needs review, teachers need training, and teaching devices for the deaf children should be improved.

Keywords: Curriculum; English; deaf children; teachers; challenges.

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1. Introduction

There may be two main policies regarding education for the deaf, teaching them separately in deaf schools (designed only for young children who are deaf and mainly taught in sign language by specialised ‘teachers of the deaf’) or including them with normal peers (in mainstream schools). As has been explained by Ahmed [1], the mainstreaming policy is widely accessible in most countries with many options of schools to choose from in most areas. However, in contrast, in such countries people may struggle to find deaf schools nearby, as they are fewer and harder to find. Furthermore, he argues that deaf children who study in deaf schools are probably not as prepared for the hearing world outside of the school as hearing students. Initially, Oman employed a policy of separate education. The establishment of Al Amal School in 1980 was the first initiative made towards addressing the special needs of the deaf children in the Sultanate of Oman [2]. This school caters for children from kindergarten to grade 12, at a campus designed with special equipment in the classrooms and an environment to support them obtain quality education. The pupils are taught subjects which include Arabic, Science, History, Sports, Geography, Art and Music [2-3]. However, over time, the Sultanate made a deliberate policy to integrate the education of children with disabilities in basic education schools. The Ministry of Education implemented this program starting from the 2005/2006 academic year through the opening of separate special classrooms for students with hearing impairments and intellectual disabilities in selected schools. This policy was initiated to eliminate the effects of disability, develop the self-confidence of the students through interaction with normal children and to equip them with daily living skills [4]. Such inclusive education is defined as an approach to education where all students, irrespective of any challenges they may have, are placed in age-appropriate general education classes that are in their own neighborhood schools to receive high-quality instruction, interventions, and supports that enable them to meet success in the core curriculum [5]. According to this concept, the inclusive school and classroom function on the principle that school children with disabilities are as essentially competent as learners without disabilities. Therefore, all the learners can be full members in their classrooms as well as in the school community. This means that they mix freely with their peers (who have no disabilities) as much as possible, with general education being the first-choice placement for all learners [6]. In this article, focusing on a region of Oman where there are six government schools implementing the inclusive education programme for deaf learners, I examine programme effectiveness.

2. Literature Review

Most research [7-9] has largely focused on the materials and teaching devices that deaf children need to enhance their learning. Hardly any of these studies however have discussed the curriculum, particularly when it is related to the adoption of the mainstream curriculum in teaching English as a second language to deaf children. These are research gaps addressed by the present study. In Oman, [10] and [11] have focused on education of children with learning difficulties in general in schools without examining the inclusion programme for children with hearing impairments. Meanwhile, a latter study [12] has much more in common with the present study. It has examined the education of deaf children in general without focusing on specific areas such as learning languages, the focus of the present study.

Al-Ghafri [10] and Al-Saidi [11] tried to ascertain the level of effectiveness of the inclusive education programme (integration of students with learning difficulties (LD) into mainstream classes) implemented in the Omani schools. For example, Al-Ghafri [10] attempted to provide insights into how the effectiveness of the special educational needs programme for students with learning difficulties in a region of Oman can be improved. The study was conducted in one of the northern regions of Oman, Al Dhahra, and involved 11 special educational needs coordinators, 30 class teachers in Cycle 1 schools (grades 1 - 4), 3 parents of students with LDs, and six students with LDs. Data were collected using two methods: a structured questionnaire and interviews. In comparison, Al-Saidi [11] explored Omani teachers' perceptions toward the inclusion of students with learning difficulties (LD) in the mainstream basic education in Oman, specifically in Cycle 1 schools. A sample of five teachers involved in one Cycle One school were selected as participants. Data were collected through research instruments such as a questionnaire, semi-structured interviews, and a focus group interview. Although the two studies [10] and [11] differ in their objectives, they share a common theme in their findings that there is an essential need for adequate teaching materials that are to be used in such inclusive programs. Findings of these studies also reported that the teacher participants expressed their concerns regarding the challenges that they faced in modifying the lessons found in the coursebooks for their daily classroom instructions. Other concerns raised by these teachers include a lack of training in the special needs (SEN) area, the need to reduce the number of students in a class, the need for additional provision of teaching and learning resources for SEN students as well as the need to reduce daily administrative work of the teachers involved [10 - 11]. It is also significant to highlight that, in the case of teaching English to these SEN students, the teachers interviewed voiced their concerns about the need for having special-trained English teachers in conducting language lessons in the programme offered, specifically to identify and facilitate the students with LD [10]. It is noteworthy to highlight that the two studies only focused on one type of inclusion programme implemented in the schools, which is the integration of students with LD within mainstream classes studying alongside normal peers in the same class. In this case, the context of these studies only focused on the LD students that are involved in inclusive programme that offer 1-3 periods per week of extra support from specialized teachers, while the remaining learning hours are spent studying alongside their peers in the mainstream classes [13]. Subsequently, the learning needs of the deaf students have not been addressed and hence there are some issues that need to be addressed. So, this study is positioned to examine the level of effectiveness of the inclusive education programme for deaf learners implemented in the Omani schools especially the use of the mainstream curriculum in teaching English as a second language to deaf children. Comparatively, the study by Al-Rayes [12] has much more in common with the present study as it has focused specifically on the education of deaf children. The difference that exists between Al-Rayes's study and the present study however, is that Al Rayes's study only explored and evaluated the Omani deaf education practice in general. It involved several teachers of deaf students, parents and deaf students studying in Al-Amal school (a deaf specialized government school) as participants. Among the key areas investigated in relation to deaf education in the study are: strategies implemented in educating deaf students; attitudes of parents, teachers and students toward deaf students and their abilities; requirements of deaf inclusion in terms of equipment and facilities needed; the area of the curriculum applied in teaching the deaf in Oman. The study found that the majority of the teachers and students involved felt that the mainstream curriculum (for all school subjects, not exclusively English language) was inappropriate for deaf learners' needs and abilities at the Al Amal Deaf Education school. Furthermore, the

parents involved expressed concern about the deficiencies in the layout, equipment, and facilities in the school, which are not supportive of the needs of their deaf children. For example, they said the floor is not carpeted, the lightings are not distributed properly, and the layout does not help in echoing the sound. Additionally, the teachers are found to be lagging in their teaching skills and experiences. Accordingly, some of the strategies recommended in the study for educating deaf students include enhancing the skills of teachers to use a variety of teaching techniques, enhancing the awareness of normal children about the needs of the deaf children, and improving the quality of facilities to match the needs of deaf children. Additionally, findings from Al-Rayes's [12] study corroborate studies done in neighboring countries (Al Amri [14]; and Al Ateebi, 2011, cited in Al-Rayes [12], which revealed that the most problematic issue upon applying the mainstream curriculum in deaf classes are the aims and objectives of the curriculum which do not suit the linguistic growth of deaf children. Rather it is also found that the curriculum does not respond or cater to the specific needs, learning styles and motivation of the deaf students. This is crucial, as many researchers in the area of deaf education have indicated the mismatch of general curriculum content and the specific language learning needs of deaf or hard of hearing students. The present study aims at examining the extent of adopting the mainstream curriculum in teaching English to deaf children. It seeks to investigate this issue with specific focus on the deaf or hard of hearing children who are taught English as a second language in various Omani schools. Therefore, the three main challenges that have often been documented in the literature regarding the adoption of mainstream curriculum for teaching deaf students would also be addressed. These challenges are categorized as follows: 1) relevance of the curriculum, 2) effectiveness of the pedagogy, 3) quality of teachers.

2.1. Relevance of the Curriculum

Mainstream curricula are usually broad and demanding. They are designed centrally and are typically inflexible with no room for alterations for teachers to test new approaches [15]. They focus on academic content which is often measured through homogeneous grade level and nationwide testing of children. But as Stinson and Antia [16] argue, philosophically, inclusion means that the orthodox classroom will adjust to the child. This necessarily implies that the study curriculum should be adjusted to accommodate the deaf student. Moores and Martin [17] provide a clear articulation of the evolutionary nature of deaf learners' curricula. They argue that in the distant past, deaf children were taught vocational education with very little attention to English and other subjects. By the second half of the 19th Century, deaf learner's curricula shifted to vocal communication skills which have been emphasized through the 20th century. Yet, in today's inclusive education classrooms, schools do not have flexibility to adapt any part of those curricula, hence the rigidity challenge. Accordingly, the present study investigates the extent to which the existing curriculum structure is relevant to the teaching of English language to deaf children in Oman; and the extent to which the curriculum recognizes the potential of the deaf and how it facilitates for them learning English as a second language.

2.2. Effectiveness of the Pedagogy

In ensuring that effective pedagogy is achieved, there are several considerations that would need attention, namely understanding the diverse needs of different learners, and on adapting to the on-the-ground conditions needed during the teaching and learning process in the classroom apart from the teacher being well-versed in

his/her subject. In this instance, a good teacher is a teacher who has the capacity to encourage their students to learn and to skillfully utilize different pedagogical approaches to enhance the learning process among his/her students. In the case of deaf education, the foremost obstacle to deaf children in inclusive education classrooms is the complicated communication. Miles and his colleagues [18] found that deaf and hard of hearing children, despite using hearing aids in the integrated classrooms were faced with the practical difficulty of having proper communication. In their responses, deaf children complained that while in class, the teachers spoke too quickly, leading them to miss out much of the information delivered by the teachers. Similarly, Cawthon [19] reports on studies that have concluded that poor academic performance of deaf children was a function of their language delays and poor communication with their teachers. Other studies have reported that due to their own difficulty to communicate, it was almost impossible for the deaf students to make friends in the school [20]. The study for Al-Rayes [12] revealed that the most problematic issue upon applying the mainstream curriculum in deaf classes is that the curriculum has failed to respond or cater to the specific needs, learning styles [including communication] and motivation of the deaf students. Apart from that, effectiveness of the pedagogy should also include a positive learning environment for the students. Subsequently, Deaf children could enhance their interaction with their normal peers in school when they share sports, arts, and social activities together [10]. In the case of deaf education in Oman, deaf children study in separate classrooms within regular schools. Yet the issues of inadequate teachers' experiences and skills have led to deficiencies in the delivery of the curriculum [12].

2.3. Quality of Teachers

It is understood from the literature that the fundamental goal of integrating deaf or hard of hearing students in the inclusive education classrooms is to stop the discriminatory practices against disabled persons [21] as well as advance their achievement through learning with normal children. However as observed by Alasim [22], one of the key challenges facing the above goal is also the teachers' knowledge and skills in handling the deaf students. In the absence of relevant skills by the teachers, deaf students would struggle throughout their school without professional support to improve their reading and learning. Accordingly, the present study has also tried to examine the extent to which the teachers of deaf children are in need of in-service training as well as professional development in order to provide a conducive and effective teaching and learning process to the specified deaf children. Accordingly, the present study has also tried to examine the extent to which the teachers of deaf children are in need of in-service training as well as professional development in order to provide a conducive and effective teaching and learning process to the specified deaf children.

3. Methodology

The study used a mixed research method: the qualitative method was used to gather data in the form of interview protocols/recordings of the teachers and diary entries produced by the teachers involved. The qualitative method is employed to investigate the challenges facing teachers and students in schools adopting mainstream curriculum to teach English as a second language to deaf children in Oman. On the other hand, the quantitative method was used in the form of a questionnaire to solicit data. The method is used to examine the extent to which attitudes and behaviour of the deaf children are influenced by the mainstream curriculum being

adopted by schools in teaching English as a second language to deaf children in Oman.

3.1. Research Context

The study was conducted in six different schools which are located in the metropolitan area of Salalah, the center of Dhofar region. The selection of the schools is based on their direct involvement in the inclusive programs for deaf. The total number of deaf children in the six schools were 46 distributed in different grades during the academic year 2018-2019 [23]. The number of students in each deaf classroom ranges from 3 to 8 students. Arabic is the native language for both teachers and students in all the public schools and school subjects are all taught in Arabic except the English Language subject. Children's learning and practice of English in school ranges between 5-7 periods (12.5-20%) only out of the total time (40 periods) they spend in school per week. This is because all other subjects in school, e.g., Religion, Math, Science, Social Studies are taught in Arabic language. Deaf children are taught the main subjects in separate classrooms; however, they are grouped together with their mainstream peers during sports, arts, and social activities in school [10]. The researcher was informed that all the instructions in the classes, including that of the English language lessons are based on Total Communication (TC) approach. Basically, the TC approach provides a gestural presentation for every spoken utterance so that whoever had residual hearing could hear the instruction of content and those who could not hear would be able to see the content [24]. Use of a TC approach by hearing parents and teachers usually involves combining speaking and signing. Other benefits of the TC approach include its ability to open all avenues and modes of communication for the deaf child, and its demonstrated effectiveness in fostering the child's psychosocial, linguistic, and academic development [25].

3.2. The Population of the Study

To gain insights into the problems of implementing the mainstream curriculum, the investigation was done on the practice of teaching English to the deaf students. As the main aim of the quantitative part of this study is to solicit the opinion of deaf children on the mainstream curriculum being adopted by the schools for teaching English, the population for the quantitative survey is the deaf children studying English as a second language in schools located in Dhofar region in the south of Oman. The data from the quantitative survey is supplemented by data from the interviews and diary entries whose population and sample are teachers teaching English to the deaf children. Therefore, the population and sample of the qualitative survey is discussed first followed by the same for the quantitative survey.

3.2.1. Population of the Qualitative Methods

The participants in the qualitative part of this study are six teachers teaching English language to deaf students in six government schools implementing the inclusive education programme for deaf in the researcher's region (Dhofar). Out of the six, there were three female and three male teachers respectively. The three male teachers were assigned to teach male students in grades (5-10) while the female teachers were involved in teaching the female students in the selected all-girls schools in the region. Specifically, one of the three female teacher was also involved in teaching the language course of mixed gender children in grades (1-4) while the other two were

involved in teaching the girls in upper grades (5- 10).

3.2.2. Population of the Quantitative Survey Method

By the academic year of 2018/2019, the number of schools implementing the inclusive education programme for the deaf in Oman expanded to reach 59 schools, involving a total of 412 students distributed in the 11 regions of the Sultanate of Oman. Among this number of schools, there were only six schools in Dhofar region particularly [23]. For the purpose of the quantitative data collected, the participants involved consisted of 46 deaf children that were undergoing their basic education school years (Grade 1 to Grade 12) from the six schools found in the Dhofar region that implemented inclusive education. They have been undergoing inclusive education system for varying lengths of time in their respective schools. This particular group of learners were asked to complete a questionnaire prepared to seek answers regarding the extent to which the attitudes and behaviour of deaf children are influenced by the mainstream curriculum being adopted by schools in teaching English as a second language to them as it is important for the study to gain insights of their views. From the total, 41 questionnaires were returned as valid and complete. The deaf students involved in this study comprised of 9 female and 32 male students who are in Grades 4 to 10 at the six schools.

3.3. Research Instruments

The research instruments for the qualitative survey (interview and diary) were used to solicit data from teachers teaching deaf children English using the mainstream curriculum. This is intended to examine the challenges facing teachers and students in schools adopting mainstream curriculum in teaching English as a second language to deaf children in Oman. Meanwhile, a survey (questionnaire) to collect quantitative data was also administered to measure the extent to which the attitudes and behaviour of deaf children in Oman were influenced by the mainstream curriculum adopted by schools in teaching English to them.

3.3.1. Interview instrument

The researcher designed open –ended questions, arranged them in a reasonable logical order to cover the required area that are necessary for soliciting information related to achieving the objectives of the study. The interview questions comprised 10 main questions, from which the researcher later derived the following 10 corresponding themes from the analysis of the transcribed data: Relevance of the Curriculum, Coverage of the English Course Syllabus, Topics in the Course Syllabus, Restructuring of Topics in the Course Syllabus, Teaching Philosophy, Teaching Method, Classroom Activities, Support for English Language Teachers, Challenges of Teaching Deaf Children and Suggestions for Improving English Language Curriculum. These themes with their corresponding questions are presented in the following Table 3.2.

Table 3.2: Themes and Interview Questions.

Themes	Interview Questions
Relevance of the Curriculum	Do you think the curriculum being used to teach English language to deaf children in Oman is relevant? If yes, why and if no, why not? [provide examples to support your answers]
Coverage of the English Course Syllabus	Do you think the coverage of the English course syllabus is adequate? If yes, why and if no, why not? [provide examples to support your answers]
Topics in the Course Syllabus	Which topics of the course syllabus do your students enjoy most, and which ones they enjoy least, and why? [provide examples to support your answers]
Restructuring of Topics in the Course Syllabus	Would you recommend that certain topics in the current course syllabus be restructured to improve their scope, coverage and time of delivery? [provide examples of such topics to support your answers]
Teaching Philosophy	What teaching philosophy [approach and belief] do you adopt in teaching the deaf students, and why?
Teaching Method	What is the common teaching method you use in your language classroom and how do you evaluate its effectiveness?
Classroom Activities	What type of activities do you use in conducting your language classroom and how do you rate its effectiveness?
Support for English Language Teachers	What type of support do language teachers for deaf students receive to ensure effective learning has taken place? Have these supports been sufficient? If yes, why and if no, why not? [provide examples to support your answers]
Challenges of Teaching Deaf Children	<p>What are the major challenges that arise in teaching English to deaf students in Oman? Your answers should cover the following:</p> <ul style="list-style-type: none"> ● Relevance of topics in course syllabus ● Quality of course materials ● Nature of class activities ● Teaching approaches and attitudes of teachers ● How the deaf students are adapting to the curriculum. ● The interaction among normal and deaf students ● Performance of deaf students ● The extent to which the school learning environment is conducive. ● The extent of family support
Suggestions for Improving the English Language Curriculum	<p>Suggest how the existing English language curriculum can be improved to enhance the learning needs of deaf students. Your suggestions should cover the following areas of the curriculum:</p> <ul style="list-style-type: none"> ● Topics covered in course syllabus. ● Time used to cover the syllabus. ● Course materials ● Class activities ● Teaching approaches and styles ● Quality of teachers ● Facilities and support for learning ● School learning environment ● Family support

3.3.2. Teachers' diary monthly entries

Other qualitative data were obtained from the teachers' diaries, which were used to collect the information regarding the teachers' experiences in their English language classes with the deaf children. The teacher participants were asked to write a diary after teaching each unit (approximately once a month), reflecting what

they had achieved during the period of teaching the unit. In order to facilitate the teacher participants' task, the researcher provided them with a form to fill in. The sheet was divided into three sections. In the first section, the participants were asked to write an overview of the unit explaining the topics they taught and the materials they used. In the second section, they were requested to highlight the challenges they faced while teaching the different lessons in the unit. In the last section, participants were asked to record in writing any ideas or techniques they used, or they could suggest for reducing or overcoming the challenges faced. The data solicited were analyzed using thematic analysis.

3.3.3. Quantitative Instrument (Questionnaire)

It is crucial to reiterate that, while qualitative instruments related to the interview and diary entry for teachers were administered to examine the challenges teachers and students face, the instrument for collecting quantitative data was used to determine the extent to which the attitudes and behaviour of deaf children are influenced by mainstream curriculum being adopted by schools in teaching English as a second language to deaf children in Oman. A questionnaire was constructed for the group of deaf children. The questionnaire is fairly comprehensive, covering a wide range of information and issues aimed at gauging the perception of school children on their attitudes and behaviour towards the mainstream curriculum adopted by schools in teaching English as a second language to deaf children in Oman. The questionnaire is divided into 4 sections. The first section (A) covers the profile of the respondents with three items: gender, age, and grade. This section determines the eligibility of the respondents and the quality of the expected data. The second section (B) solicits the general knowledge of the respondents about the ability of deaf students to learn English, their love, and prospects for the language. It has six items. The third section (C) which consists of 20 items, is dedicated to attitudes and behaviour-related questions. The section solicits the perception of the respondents on their attitudes and behaviour towards the mainstream curriculum being adopted by schools in teaching English as a second language to deaf children in Oman. The fourth section (D) is open ended. It invites comments from the respondents on any additional information. The quantitative instrument designed for this study has adopted mainly close-ended questionnaire, structured in a mixed format of nominal and ordinal measurements. The nominal scale is used in the demographic section of the questionnaire and, the general information section where the respondents were given two choices of 'YES' and 'NO' answers. The ordinal scale used are based on the 5-point Likert scale, namely: Strongly Disagree, Disagree, Slightly Agree, Agree and Strongly Agree. Descriptive statistics have been used in this study to firstly, generate measures of the general knowledge of the deaf children on the subject and secondly, measures of their opinions in relation to how their attitudes and behaviour are influenced by the mainstream curriculum adopted by schools in teaching English as a second language to deaf children in Schools in Oman. The measures of the general knowledge of the respondents were generated in six areas: importance of English language to the deaf children, their interest in the English, the daily usage of the English language, their levels of skills in English, the future of English in their lives, and their interest in other foreign language.

3.4. Procedure for Data Analysis

In order to assess the challenges teachers and students face, and the extent to which the attitudes and behaviour

of deaf children are influenced by mainstream curriculum, qualitative and quantitative analyses were performed on the data. The procedure used for the analysis of the qualitative data from the interviews is based on the six steps thematic content analysis method. After collecting the data through written notes and digital recording, qualitative data were thematically analyzed to code the common themes that represented the informants' point of views on issues asked. In addition to the interviews, the researcher employed content analysis method to describe and interpret the behavior of the social group (deaf children) in a classroom setting from the teachers' perspectives. Teacher's Diaries were used as research instruments to solicit data on how teachers experience the adoption of mainstream curriculum in teaching English as second language to deaf children. Data for quantitative analysis were obtained from the questionnaire survey results. Scores obtained from the relevant tests assisted the researcher to ascertain robustness of the data and the fitness of the two models (measurement and structural) generated by the SmartPLS software. Furthermore, descriptive statistics to measure frequency, central tendency (i.e., mode, median and mean), as well as the dispersion in relation to tests scores in this study were also generated using SPSS. The data were screened using SPSS to ensure they meet some of the common assumptions related to normality, absence of outliers, multicollinearity and skewness.

4. Findings

4.1. How do Omani English teachers perceive and respond to the challenges faced by students who are deaf or hard of hearing?

In the following sub-sections, discussions on the specific challenges, as well as suggestions will further be explored from the diary entries and interview protocols documented. These challenges and their corresponding suggestions are presented in the following two subsections. The subsequent subsection (a) presents the challenges faced by the teachers and suggestions made to overcome them.

4.1.1. Teaching English to Deaf Children: Challenges and Suggestions

The majority of the participants are unanimous that teachers face challenges in teaching English to deaf students in schools. These challenges and their corresponding suggestions are categorized into the themes that were identified earlier in the interview protocol questions.

4.1.1.1. Family support

One key challenge reported by teachers was a lack of family support. For example, P1 reported that some family members do not believe in the abilities of their children by saying '*some families support their deaf children and believe on their abilities, but others are not able to do the same role*'. While P3 also highlighted that several family members are illiterate when he said '*most of their families are not educated, that's why they are not getting much support*'. This implies that the family members will not be in a position to support the efforts of the teachers especially in homework assignments, social and emotional needs of these deaf children. To overcome these challenges and according to P3, it is suggested that family members participate in school events, including sitting in classes to witness the abilities of their children. Furthermore, there should be teamwork between parents and school for feedbacks and the school should enhance the awareness of family members on

importance of education. These suggested initiatives might help parents to change their negative views about the level of support provided to their children in school as found in Al-Rayes's [12] study. He reported that the parents expressed concern about the deficiencies in the equipment and facilities in the school, which are not supportive to the needs of their deaf children such as *'the floor is not carpeted, the lightings are not distributed properly, and the layout does not help in echoing the sound'*.

4.1.1.2. Relevance of curriculum

Another challenge relates to the curriculum is that it has not been tailored to cater adequately for the various levels of the deaf children classes. There are some degrees of deficiencies for each level of class: low, intermediate and high. For example, P3 stated *"the first thing it is not in their level" and "the second one, it should be relevant to their needs"*. This implies that teachers must rely on their creativities to make up for the lacks. In order to overcome the two challenges of curriculum, P2 for example, said *"I suggest that one of the simplest tries for those students is to have their own curriculum which was already prepared for them and not only to adapt the normal curriculum for the normal students"*. This finding obviously supports the crucial finding other researchers have indicated which is the mismatch of general curriculum content and the specific language learning needs of deaf or hard of hearing students [12 - 14].

4.1.1.3. Interaction with normal students

In the case of deaf education in Oman, deaf children study in separate classrooms within mainstream schools. This setting is strongly recommended by some studies such as Campbell, Gilmore & Cuskelly [17], who reported that despite welcoming the idea of inclusive education, many teachers believe that the special needs of disabled learners can better be achieved in separate classrooms. However, P3 suggested that deaf classes to be integrated with the normal children. But he also cautions that deaf children may face communication difficulty if their classes were integrated. For example, when he was asked if integrating deaf with normal students in same class will be useful for them, he said *"May be useful, but it will be very difficult for them because as you know they are deaf"*. The participant's worry is truly valid as other studies [18] found that deaf and hard of hearing children, despite using hearing aids in the integrated classrooms, were faced with the practical difficulty of having proper communication and they miss out much of the information when teachers speak fast. In terms of integrating deaf with their normal peers, the participants confirm this partially exists in the Omani deaf education context. For example, P 2 stated *"The deaf students are adapting the interaction among normal by learning with them in the same class ... in some subjects such as sports and arts"*. Al-Ghafri [10] also concluded by saying that deaf children could enhance their interaction with their normal peers in school when they share sports, arts, and social activities together.

4.1.1.4. Relevance of topics, Quality of course materials & Class activities

Meanwhile, the extent of relevance of the topics covered in the syllabus reveals three major challenges: some of the topics are too abstract, which are easily understandable by normal children; the topics are not designed to take into consideration the disabilities of the deaf children and the topics seem to be similar across all the levels

of classes, and do not seem to accommodate the variations in levels of classes. For example, P1 stated *“the topics again sometimes are not relevant and take the students away from their everyday life and not suitable for their disability”*. These three challenges imply that the teachers have to be creative and skillful in the way they teach and handle the deaf children. The suggestions for the three challenges are: review of the present topics in the syllabus to include practical aspects that relate to the day-to-day activities of the deaf children such as *“sports, body parts, items of house they using usually and also transportation”* according to P3. The second suggestion reported by P1 and P2 is for the Ministry to prepare a special syllabus that caters for the needs of deaf children, for example P1 said *“Yes, I really prefer and recommend that students have the right to have their own syllabus which already been prepared for them to match their needs*. The challenges mentioned support the idea that mainstream curriculums are usually broad and demanding, designed centrally, typically inflexible with no room for alterations for teachers to test new approaches and they focus on academic content which is often measured through homogeneous grade level and national wide testing of children [15].

4.1.1.5. Time Allocated for Syllabus Coverage

In addition, the participants are of the opinion that the time allocated for covering the syllabus arises two main challenges: the time is insufficient to cover the syllabus and the time for teachers to prepare their lessons is inadequate. P1 explained that by saying *“teacher has to prepare a variety of activities which is sometimes represent a challenge and needs extra time and effort. Of course, the characteristics of the deaf students sometimes cause them not to perform in the expected way”*. Teachers are compelled to shorten the syllabus and to allocate more time for preparing lessons. This implies that teachers have to rush in their teaching if they had to complete the syllabus, and they will be forced to repeat old lessons because preparing new ones would be time consuming. The suggestions reported by teachers are to review the syllabus to reduce the number of topics and accordingly teachers would have sufficient time to prepare their lessons. For example, p5 reported *“there are topics that should have spent less time on like those require describing things, because they depend on cumulative ideas”*.

4.1.1.6. Quality of teachers and Teaching Method

The quality of teachers is yet another challenge. The majority of teachers lack the in-service training and professional development required for teaching deaf children. For example, and according to P1 *“training, training, training 400 times of training, is very important for all teachers and particularly special needs teachers or the teachers who teach deaf students. Even the expert teachers need annual training to be up to date with all of the elements of teaching process. If the teacher gets suitable and sufficient training he will be able to help his students”*. Another teacher P3 also highlighted the need to let teachers *“participate with another schools .. I mean to share the experience from one school to another”*. The shortage of in-service training and professional development as a challenge reported by the participants reinforces the findings of other studies that documented the unavailability of specialized teachers who have undergone specific training related to teaching deaf learners [26, 27, 28]. Furthermore, quite a considerable number of teachers lack support for teaching materials and tools. For example, P3 said *“We need many things like some books of ways of deaf teaching and also we request our department to give us more workshops to give us a lot of information about how to teach*

these students". Needless to say, these will affect the quality of their teaching. Besides the quality of teachers, the teaching method is reported to be skewed in favor of teaching the normal children. The implication is that teachers will find it easy teaching the normal children and in contrast they need to put a lot of effort and creativity to cater for the needs of the deaf children. The challenge of the teaching method could be overcome as suggested by participants by enhancing the method of teaching the deaf children with tools such as sign language and other visual aids such as smart board. This finding also goes along with the finding of Alasim's [22] study that the teachers involved in such programmes are found to be lacking in the necessary knowledge and skills of handling deaf students.

4.1.1.7. Abilities of Deaf Children

As for the abilities of the deaf children, some of them are poor in their studies. For example, one teacher P3 stated *"I have the grade 6 students in my school, they are not familiar with all sign language, they are very very poor except one student"*. To overcome the challenge, P1 said *"I suggest also that the ministry kindly prepare specific materials for the course which must be suitable for students needs and characteristics"*. It is also suggested for the teachers to be skillful in their approaches in addressing the needs of such children. For example, P2 stated *"experts should focus on the needs of the deaf and their ability to understand and receive information ... deaf students need all visual methods and direct activities"*. This challenge illustrates teachers' need to acquire sufficient teaching skills that enable them enhance their children learning. However, the finding also supports the previous studies that emphasize in order for deaf children to attain optimal language development, they need to acquire the sign language to some degree [29 - 30].

4.1.1.8. Learning Environment & Performance of deaf students

Finally, one challenge is that the learning environment of the deaf children is largely confined to classrooms. This decreases the opportunity of the teachers to interact with these children outside classroom. Such environment is also good for the children for their emotional and psychological health, which in turn enhances teaching and learning. The participants have suggested that the school introduce co-curricular activities for the deaf children and organize educational visits and trips. For example, P3 said *"let them participate outside the school when they have any workshop or visit another school or institute to have information about what is happening out of school"*. This finding reveals that effectiveness of the pedagogy should also include a positive learning environment for the deaf students, as claimed by Al-Rayes [12]. The previous section above has discussed the responses of the participants based on the interview protocols. The subsequent section discusses the responses of the participants based on the teaching diary entries.

4.1.1.9. Learning English by Deaf Children: Challenges and Suggestions

The following section provides insights on the perceptions of the teachers on the challenges deaf children face in their language learning experience in an inclusive programme. Data of the responses were collected via the diary entries.

The challenges that the deaf children face learning English can be categorized into the following three aspects: comprehension, reading skills and writing skills. The deaf children have difficulty comprehending abstract sentences, those in passive form, perfect tense in reported speech, interactive texts, new symbols and new vocabularies. For example, in Grade 6A (unit 2), students meet a long reading text (a story about a girl's life). Participant teacher no.5 recorded in his diaries that among the challenge students faced were to read the information by themselves and to write long sentences. This particular story as displayed in figure 1 below shows the amount of reading required by the deaf student in grade 6 in order to be able to answer the questions in figure 2.

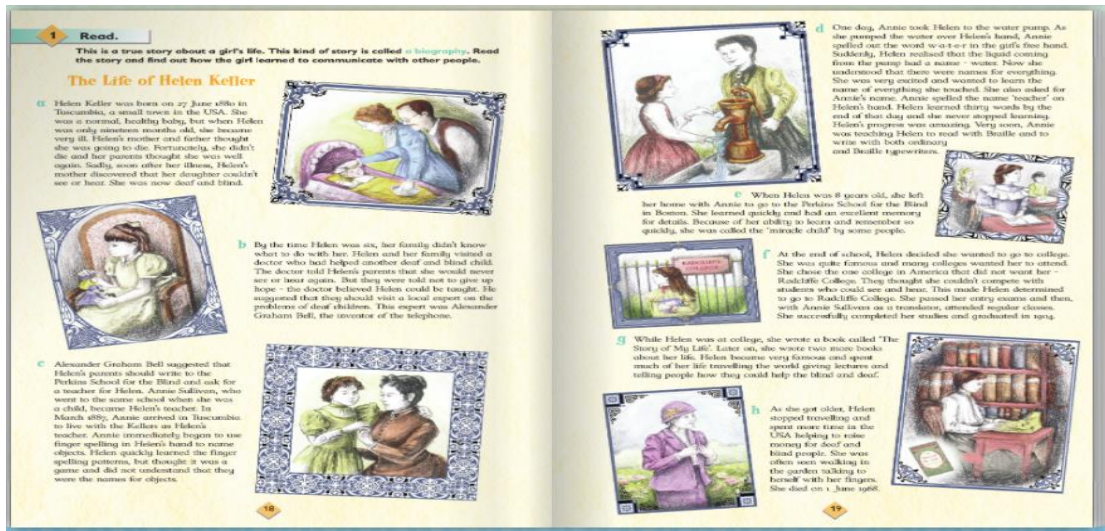


Figure 1: (Grade 6A - Unit 2, CB Pg. 18-19).

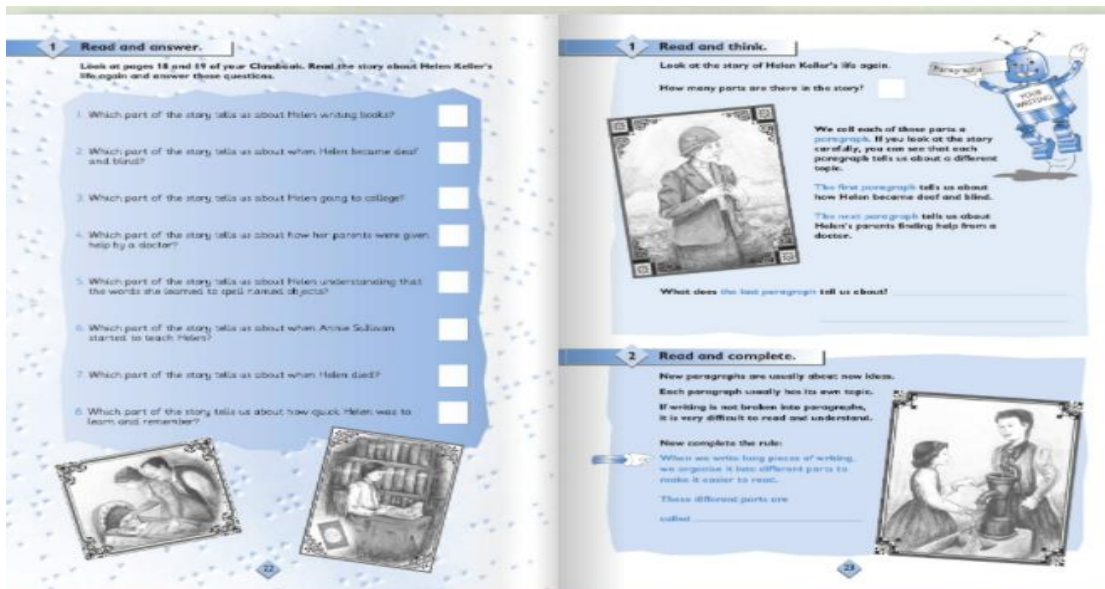


Figure 2: (Grade 6A - Unit 2, SB Pg. 22-23).

The text also contains some sentences written in a passive voice form, such as "But they were told not to give up hope", which was another challenge reported by the participants. In addition, P3 added that many reading activities make students feel bored and unable to understand all information. The participants suggested in general that these comprehension challenges can be overcome by frequent use of practical, applied sentences, those in active form; the use of present, past and future tenses; and the use of teaching aids and techniques such as smart board. With regards to writing skills, deaf children have problem with their handwriting, which is unclear. They lack the skills of writing a paragraph, about a picture, email, making written survey and irregular verbs. For example, P 3 recorded in the diaries that in Grade 5A (Unit 1, SB p. 4) as in figure 3 below, children are required to learn the difference between regular and irregular verbs in past tense. It was noticed that children most often add 'ed' to the irregular verbs in past form and they repeat it all time. Probably because they don't have a spoken model. The teacher wrote that the way of explaining the part of grammar of regular and irregular verbs is a challenge he faced.

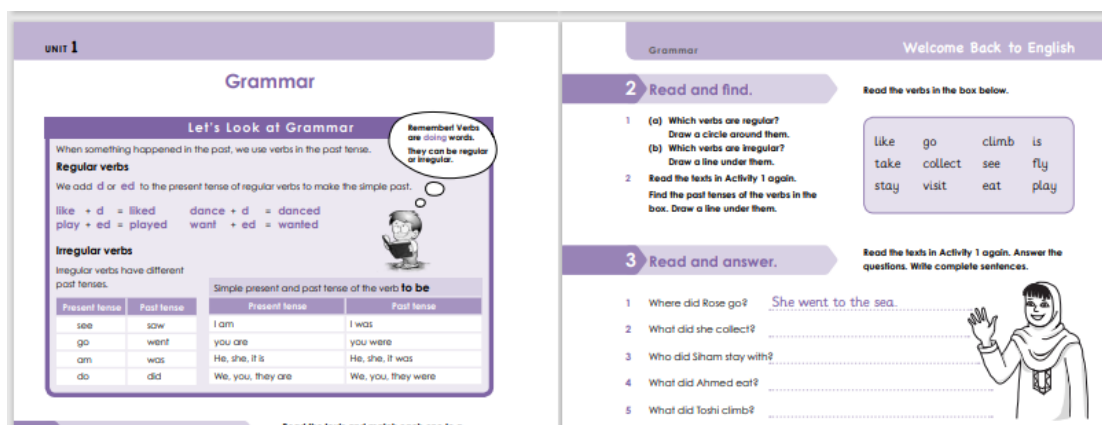


Figure 3: Grade 5A (unit 1, SB pg 4).

To overcome the above mentioned challenges, deaf children need to adopt teaching aids and techniques in the form of smart board. They also need to use sign language to learn new words and vocabulary items in addition to constant training in writing. In terms of reading, deaf children can rarely read by themselves, and they cannot read long sentences. In most cases, they have difficulties understanding all the information they read, hence they feel bored. To overcome their challenges, teachers should give more exercises and explain the meaning of vocabulary in the texts by sign language.

4.2. How do deaf students feel about their English language learning experiences?

The perceptions of the respondents (deaf children) are unanimously positive in five of the six areas. They all acknowledge that the English language is important to the deaf children who still maintain great interest in the language. They reported they have good writing and reading skill in English, and they are eager to use English in future in all spheres of their lives. The deaf children have also indicated they are interested in learning other foreign language in addition to English. This is partly motivated by their love and interest in a foreign language like English. In addition, they acknowledge they use English outside classroom. Indeed, the findings from the descriptive statistics show that there are good interactions and social bonds between the deaf and normal

children inside schools that adopt mainstream curriculum for teaching English to deaf children. These findings are in line with the policy of the Sultanate of Oman to integrate the person of disability into the mainstream school in order to eliminate the effects of disability, develop the self-confidence of the students through interaction with normal children and to equip them with daily living skills [4]. The findings refute other studies that found it almost impossible for the deaf students to make friends in the school [20]. On the questionnaire, the deaf children reported they find it easy to learn English and their attitude is to use the language most of the time. They also indicate that their teachers are good and helpful for the deaf to learn the language especially that the textbook the deaf use is easy to understand. They feel satisfied with English classes at the school and would thus recommend to other students to join. The findings concur with the observation of Alasim [22], who acknowledged the teachers' knowledge attitude and skills in handling the deaf students. The respondents however have mixed attitude about the facilities provided for teaching English. Half of them believed the facilities are adequate and the other half see them otherwise. This may be because they are influenced by their teachers' views regarding the level of support they received from the Ministry. Quite a considerable number of teachers stated while interviewing them that they lack support for teaching materials and tools. For example, P3 said *"We need many things like some books of ways of deaf teaching and also we request our department to give us more workshops to give us a lot of information about how to teach these students"*.

Most of the respondents reported that the people close to them think English is important to the deaf and they encourage their children to learn the language. Furthermore, the close people are excited, proud and happy to see these deaf children excel in learning English. The findings mirror the results of other studies for example, [31,32] that found positive and significant effect of the subjective norm on behavioral intentions and actual behaviors in the area of education. Moreover, the respondents from the deaf children are unanimous in their views that they plan to make English important in all spheres of their lives, using the language in most of their activities even after they graduate from school. Furthermore, the deaf children are determined to excel in English in writing, reading, and speaking; and they are excited to learn other foreign language as well because of the motivation they have in learning English. The findings show that the deaf children's interest towards English supports Oman's aspiration of making English an important subject in the Sultanate [33]. The students were also asked about teacher's ability, disabilities of the deaf children, mainstream school, communication skills, use of learning devices, special curriculum, and psychological stress as seen in the table below:

Table 4.1: Measuring the Attitudes and Behavior of Deaf Children towards English language Learning experience (N=41).

Items		A (%)	DA (%)	Mean	STD
PBC1	The teachers have the abilities to make me understand the English lessons well	92.7	7.3	4.44	.950
PBC2	Learning English in the mainstream school does not hinder my performance to score good marks	95.1	4.9	4.22	.909
PBC3	The communication skills used in the English class help me to understand the lessons easily	97.6	2.4	4.56	.743
PBC4	It is not easy for me to learn English without computerized sign language	100.0	0.0	4.07	.848
PBC5	It is not easy for me to learn English without cochlear implants	39.9	60.1	2.66	1.063
PBC6	It will be easy to learn English with a special curriculum for deaf students	100.0	0.0	4.29	.680

Note: A = Agree, DA = Disagree, STD = Standard Deviation

As can be seen, the majority of the respondents are of the view that the abilities of the teachers were useful for helping them understand English and their disabilities [deaf children] do not create any impediments for them to learn the language (Table 4.1). Furthermore, learning English using the mainstream curriculum has not in any way affected their performance in scoring good marks in the language. The communication skills being used have positively enhanced the English understanding of the deaf children. Nevertheless, most of the deaf children feel the need for a special curriculum that could make learning English easier, and they believe it would not be easy for them [deaf children] to learn English without using learning devices such as computerized sign language. These findings concur with several studies for example [34-36] that have concluded that deaf children need computerized devices to aid their learning.

4.3. What additional training and support is needed to further improve deaf students' English language learning?

On the other hand, the participant teachers have in principle acknowledged that they need various supports to enhance their classroom teaching. The following are some of the expressions from the participants regarding the type of support needed for the language teachers of deaf students:

"The answer of course is training, training, training 400 times of training, is very important for all teachers and particularly special needs teachers or the teachers who teach deaf students. Even the expert teachers need annual training to be up to date with all of the elements of teaching process. If the teacher gets suitable and sufficient training he will be able to help his students". (P1)

"I think as we are teachers teaching these disable students, we don't have enough workshops and special books for sign word and also master trainer in this area who have much experience of this way of teaching around the region. We need many things like some books of ways of deaf teaching and also we request our department to give us more workshops, to give us a lot of information about how to teach these students". (P3)

As can be seen in the quotes above, P1 and P3 respectively provided their views on the theme related to the support for skills enhancement. P1 emphasized the importance of training as the kind of support needed to enhance skills. She added that if teachers get suitable and sufficient training, they will be able to help their students. Meanwhile P3 highlighted the urgent need for workshops, special books for sign language and master training as the most important support language teachers for deaf children require to enhance their skills. The participants in the interviews acknowledge that the teachers need support to enhance their teaching. However, the support teachers need and are yet to receive include training, workshops, teaching tools and materials that include special books for teaching sign language, books with new teaching techniques for the deaf. Some of the support teachers have received are books, CDs, smart board computer and pictures. Similar responses were also documented in the teachers' diaries. However, unlike the interviews, the diary entries provided also the intimate insights on the day-to-day challenges that the teacher encounters during the teaching practice. The participants explained the various teaching methods and tools teachers use in English classes for the deaf children. The main teaching method used by almost all the teachers is the total communicative approach. To enhance this approach teachers, use teaching devices and materials at varying degree. Most of the teachers use visual facilities such video and instructional games in addition to sign language, smart board, flash cards, transparencies, drawing, still pictures, textbook, class book, skills book and course book. Other teachers use kinesthetic skills, sometimes outdoor classes, technology for self-learning, matching pictures and missing letters, writing the word, multiple choice questions, movements inside the classroom, reading, writing and practical applications through computer and Integration between materials. These methods are deemed effective because they enabled the deaf children to enhance their understanding, retain information and become creative. The methods are also seen to motivate their interest towards learning English. This is also confirmed by the findings from the quantitative survey, which shows that the deaf children enjoy their English lessons.

5. Discussion and Conclusions

This section makes use of the data from the quantitative survey, interviews, and teacher's diary entry to discuss the major implications and the corresponding recommendations for the pedagogy. These implications are related to the following four areas: the curriculum, syllabus, the deaf children's learning needs, and teacher's skills and materials. The findings of the quantitative survey data reveal that the abilities of the deaf children and the support from people close to them have significant impact on their attitudes and behavior towards the mainstream curriculum adopted by schools to teach English. The significant influence of the important people around the learners has also been found in other studies like Alhamami [37-38]. Furthermore, the use of learning devices such as computerized sign language makes it easy for the deaf children to learn English. Moreover, the facilities in the school for teaching English to the deaf are found to be adequate. Meanwhile the data from the interview show that the teaching of the deaf children is confined to the classroom environment which does not help to enhance the pedagogical creativity and innovation of the teachers outside the classroom environment. The findings also reveal that although the curriculum may be relevant, but it has few challenges. Firstly, the contents are not specifically tailored to the needs of deaf children. secondly, most of the curriculum contents are not designed to take into consideration the variations in the different grades. The course syllabus has overlooked the disabilities of the deaf children as the syllabus is very long, teachers have less time to prepare, most of the topics covered are too abstract and similar across all grades. These findings concur with other studies concluded

that mainstream curriculums are usually broad, demanding and are typically rigid with no room for adjustments for teachers to test new approaches [12;15;17]). The teachers lack some teaching materials as well as need more support to enhance their teaching. The support teachers need and are yet to receive include training, workshops, teaching tools and materials that include special books for teaching sign language, books with new teaching techniques for the deaf. These results also agree with Alasim [22] that the teachers' knowledge and skills in handling the deaf students are considered key challenges. In the absence of relevant skills by the teachers, deaf students would struggle throughout their school without professional support to improve their reading and learning. Based on the data from the teacher's diary entries, the deaf children face some difficulties in comprehension and to some extent lack writing and reading skills. This reflects that poor academic performance of deaf children was a function of their language delays and poor communication with their teachers [19].

Therefore, it is of paramount importance for schools in the Sultanate to involve the people close to the deaf children in their learning activities, and the school should continue to invest in computerized devices for learning English. Furthermore, the schools need to design co-curricular activities to extend the learning of the deaf children outside the class environment. This will also enhance the creativity and innovation of teachers and at the same time motivate the deaf children towards learning. The course syllabus must be reviewed and shortened to include more practical aspects and to give ample time for delivery. The facilities for teaching English to the deaf should be upgraded and increased, and the schools need to establish effective counseling unit to address the psychological need of the deaf children. To overcome the comprehension difficulty of the deaf children, the school must encourage the teachers to use practical and applied sentences, present, past, and future tenses, simple texts, tenses in active form, and to use smart board. Meanwhile teachers must train the deaf children and use sign language for them to enhance their writing skills. To improve the reading skills of the deaf children, the school should request the teachers to provide to these children more exercises, explain meanings using sign language and furnish them with a list of verbs and meanings using sign language. On the other hand, schools enhance the skill of teachers through training and workshops, and support them with teaching tools, special books for teaching sign language, and books with new teaching techniques for the deaf. Meanwhile the policy makers should design a special curriculum for the deaf children and could also experiment the idea of integrating the deaf with the normal children in the same class to enhance interaction and social cohesion. Furthermore, the policy makers should ensure that the curriculum is reviewed, and its contents are updated to include the social and emotional aspects of the deaf children. At the same time, the curriculum must take into consideration the variations in the different grades.

6. Suggestions for Future Research

This study sets a guideline and new direction in reproducing the research in different areas of teaching foreign languages, other than English, to deaf children. Since this study was conducted in Oman, it would be easy to replicate it in the cases of Arab and Muslim countries due to shared culture, history, language, and religion. Moreover, this research could be extended to deliver training programmes for deaf in other schools in Oman.

Another suggestion for future research would be to repeat this study using a large sample size in Oman. A country-wide survey should include cities, and regions where there are schools of the deaf children all over Oman. This would reflect wider geographical coverage as well as wider representations of the whole population of deaf children in Oman. Such country-wide survey would allow the generalization of the study. Finally, previously stated, there is a lack of research on the adoption of mainstream curriculum for teaching English as a second language to deaf children in Oman. The novelty of this study lies in the fact that it is pioneering research. To the best knowledge of the researcher, most of the published works pertaining to the deaf students learning English language mostly centers on their need to acquire the sign language to some degree to attain optimal language development [29-30]. Hence, another novelty of this study is evident by the fact that it has covered an area that is severely under-researched in the Arabic world, particularly in Oman, as shown by the gaps in the extant literature surveyed in this study.

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