

## **Challenges of Educating Students Who are Deaf and Hard-Of-Hearing in Jordan**

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### **Abstract**

*The main aim of present study was to review current special education programs and curricula as they relates to deaf and hard-of-hearing students, and review them using Jordanian national standards. Qualitative data were collected throughout the study. The results showed that educating students who are deaf and hard-of-hearing is challenging. These challenges included a lack of remedial and educational programs, insufficient teachers, unequipped schools, and a lack of instructional and assessment tool. Discussion and recommendations were included.*

**Key words:** Deaf education, special education, hearing impaired students, assessment, Jordan.

### **Introduction**

Jordan is a country which depends on the development of the human resources. After the declaration of United Nations in 1981 a year specified for the disabled person, Jordanian Government paid special interest in persons with disabilities. Therefore, Jordan issued the law for the welfare of disabled person in 1993 and modified it in 2007. The Ministry of Education assumed full responsibility of educating students with hearing loss and established The Directorate of Special Education with 10 schools to meet the special needs of this group of students. Despite the limited resources in Jordan, the Jordanian government provided these schools with the support needed in order to achieve the maximum potential of students who are deaf and hard-of-hearing and help those students to obtain their optimal development (Ministry of Education, 2010). However, there is much to be done in providing students who are deaf and hard-of-hearing with the facilities needed. These schools are located in most populated cities, but frequently lack sufficient financial support. Furthermore, students who are deaf and hard-of-hearing study the same curricula designed for nondisabled students and have the same educational cycle.

Reviewing the related literature maintains that students who are deaf and hard-of-hearing are considered exceptional learners (Hallahan, Kauffman, & Pullen, 2009; Smith, 2007, Beveridge, 1999; Bunch, 1987; Moores, 2001). These students require special services which must be offered by qualified and skilled teachers in order to respond to their unique needs (Beveridge, 1999). In addition, hearing loss significantly influences the language and speech development of students who are deaf and hard-of-hearing that negatively affects their academic achievement, social and emotional interaction, and cognitive milestones (Moores, 2001). According to a study carried out in Jordan, El-Zraigat (2007) reports that the students who are deaf and hard-of-hearing had poor expressive writing skills. Another study carried out by El-Zraigat (2010) indicates that the students who are deaf and hard-of-hearing lack adequate reading skills in general. A study conducted by El-Zraigat and Al-Emam (2005) about problems faced by students with hearing loss. Problems faced by students who are deaf and hard-of-hearing revealed that students with hearing loss suffer from communication, academic, social, emotional, and family problems. The study recommended providing those students with services needed in order to enable them to achieve an optimal life. Bunch (1987) indicates that students who are deaf and hard-of-hearing need special language, speech, and audiological rehabilitation curriculum. In this context, Syverrud, Guardino, and Selznick (2009), emphasizes the effectiveness of teaching phonological skills to a child who is deaf, like wise, Livingston (1999), stresses that educating students who are deaf should be linked to language learning with content learning.

On the other hand, Naiman, (1979), maintains the importance of a social learning curriculum for children who are deaf, and Hintermair (2006) reflects the crucial role of empowerment of parents of deaf and hard-of-hearing children to manage their stress and resources. Educating special needs including students who are deaf and hard-of-hearing is considered a process that consists of determining eligibility, delivering special education services, and the final step of this process is evaluating (Ysseldyke & Algozzine, 1995). Eccarius (1997) describes the education of students who are deaf and hard-of-hearing as a complex process which requires appropriate placement, identifying the mode of students learning, modified curricula, using audiological technology, schools and family services, and identifying strengths and needs of targeted students through psycho-educational and audiological assessment. The process of educating students who are deaf and hard-of-hearing are affected by different factors like attitudes, qualified and skilled teachers, quality of services offered to schools and families, acoustic environment, family environment, type and degree of hearing loss, language and speech abilities, and the existence of additional disabilities (El-Zraigat, 2009).

The importance of the present study is to evaluate the process of educating students who are deaf or hard-of-hearing in Jordan, it is hoped that the study results will provide knowledge that help in the development of special educational programs offered at schools for students with a hearing loss. On the other hand, The Directorate of Special Education and curriculum planners will find in this study a source of improving the process of educating this group of students in Jordan. Deaf and hard-of-hearing education is challenging in other countries for instance Togonu-Bickersteth (1988) indicates that deaf education in Nigeria was negatively influenced by society's weak acceptance of the legitimacy of deaf education which could be overcome by the high achievement and motivation of deaf and hard-of-hearing students. In Greece, Nikolaraizi (2000) found that deaf teachers have a lack of appropriate in-service training needed for working with deaf students; furthermore, he indicated that those teachers face problems in their work with deaf pupils like feeling insecure and unsupported, and making an extra effort in communicating deaf pupils. On the other hand, Wingerden (2003) views pupils who are deaf as a minority groups and that they should be taught by an ethnically deaf person and that it is up to the deaf themselves to determine their extent of participation. Johnson (2004) suggests that deaf and hard-of-hearing teachers should receive extra course work in regular education curricula and teaching methods as well as better preparing of pre-service training for working effectively with diverse deaf and hard-of-hearing students. Therefore, the stated aim of this study is to review and evaluate current special education programs and curricula for students who are deaf and hard-of-hearing.

### **Methodology and data collection**

The present study is a qualitative evaluation investigation. Data sources included 1) interviews, 2) observations, and 3) review related documents to deaf education program in Jordan were chosen in collecting the qualitative data. Four schools were selected based on the number of deaf and hard-of-hearing students who are registered. However, the selected schools cited on most population regions, therefore, three of them in the middle of Jordan and one in the north. Around 80% from the whole population of Jordan live in these regions.

The semi-structured interview is a qualitative data collection technique which allows for free guided conversation with 30 teachers of students with hearing loss and 4 principals of selected schools for focused on participants' perceptions of events related to specific numbers of topics. These interviews used open-ended questions. The interviews of these teachers and principals carried out by the investigator at the selected schools. These interviews guided by the questions presented in Figure 1.

How do diagnosis process and school admission achieved? How do psycho-educational assessment for students who are deaf and hard of hearing carried out? What is the content of the programs? How do instruction process executed? What kind of instructional materials and equipments available at schools and used? Could you tell me about types of facilities do the schools have? What types of professional development do the teachers have? What are the roles and responsibilities of personnel? How the families of students with hearing loss participate in educating their children? What are the programs content? And how are the educational programs of students with hearing loss evaluated?
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**Figure 1. Questions of the interviews of teachers and principals at the selected schools.**

A site meeting with the Director of Special Education to discuss the role of the Directorate as related to students with hearing loss. Interview staff in The Directorate of Special Education at The Ministry of Education and discuss their responsibilities as they relate to education of students with hearing loss were carried out by the investigator. These interviews were guided by questions presented in Figure 2.

<p>How does The Directorate of Special Education identify students who are deaf and hard-of-hearing?</p> <p>How does The Directorate of Special Education supervise the teachers of students who are deaf and hard-of-hearing?</p> <p>How does The Directorate of Special Education identify adapt curricula of students who are deaf and hard-of-hearing?</p> <p>How does The Directorate of Special Education identify the special educational needs of students who are deaf and hard-of-hearing?</p> <p>What are the programs content of students who are deaf and hard-of-hearing?</p> <p>How does The Directorate of Special Education evaluate the educational programs of students who are deaf and hard-of-hearing?</p> <p>Are there any written regulations that directing The Directorate of Special Education with its relation to schools of students with hearing loss?</p> <p>What are the goals of the Directorate of Special Education?</p>
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**Figure 2. Questions of the interviews with key persons at the Directorate of Special Education.**

Site observations were used in collecting data about the instruction process carried out inside classrooms of selected schools. The site observations focused on classrooms management, organization of the physical environment of the classes, using visual instructional aides by teachers, interaction between students and teachers, sound isolation of the schools and classes, using F.M. equipments, and using hearing aids by hard-of-hearing students. The field observations gathered by three different sessions carried out by the investigator.

Review related documents to educational programs is carried out through reviewing documents related to the National Education Strategy, reports about special education in Jordan, review relevant documents related to policies, regulations, and criteria for determining students who are deaf and hard-of-hearing at the Ministry level. Furthermore, the review process includes referral and diagnosis processes, documents related to teacher's qualifications, job description and responsibilities, staff development, diagnostic tools, materials and equipment, indications of parental involvement, and evaluation methods. In addition, the reviewing included 30 students' files. After the reviewing process completed, the conclusions have been derived.

The criteria of collecting the qualitative data were developed through three steps: the first step of preparing the criteria was the pilot study which focuses on obtaining information about deaf and hard-of-hearing special educational programs in Jordan. To achieve this goal, the investigator have executed site visit of selected schools, interview the key persons at The Ministry of Education in Jordan, and gather documents related to educational programs offered for students who are deaf and hard-of-hearing. The second step consisted of reviewing the related literature of educational programs which focuses on the following: the identification of hearing impaired students, supervision, curriculum adaptations, program content, program evaluation, classrooms management, organization of physical environment of the classes, using visual instructional aides by teachers, qualifications of teachers, sound isolation of the classes, using F.M. equipments, and using hearing aids by hard of hearing students. In the third step, the investigator selected the issues for data collecting. This process led to formulate the themes of the study. The themes were then reformulated into questions and criteria for field observations and review documents.

A theory in ground is a qualitative evaluation approach used for treating data collected by site guided interviews, site observations and review documents. Working with data collected was an ongoing process; however, the recorded interviews were transcribed and imported into ATLAS.ti qualitative research software package. The transcripts were analyzed by careful reading and coding of the imported texts on line by line coding to highlight related themes. As a result of this process, the new codes were generated and re-analyzed for developing the themes of study.

The data collected throughout this study led to the formulation of three questions, sample comments were selected to highlight the pattern of response. These questions are as follows:

- How do participants view the process of educating students who are deaf and hard-of-hearing in Jordan?
- How do participants view issues of educating students who are deaf and hard-of-hearing in Jordan?
- To what extent do special educational programs of students who are deaf and hard-of-hearing in Jordan meet the Jordanian national standards related to the education of students with hearing loss?

The multiple data sources were used as triangulation for the purpose of validity and reliability (Gay, Miles, & Airasian, 2009). The validity of the data collected was achieved by member check procedure in which the investigator went back to those who were researched, at the completion of the study, and asked them about the accuracy of the data collected and if elaboration or correction is needed or not. Another technique used to obtain the validity was extensive quotations from site visit notes and transcripts of interviews. For the purpose of the reliability in this study, the investigator re-listened of audio tapes three times with three different sessions, as well as re-transcripts of audio tapes.

### **Research results**

Analysis of the interviews with teachers and principals about special education programs and curricula related to educating students who are deaf and hard-of-hearing, conclusions of reviewing documents, and field observations revealed the following themes:

#### **Diagnosis process and school admission**

Preschool children with hearing loss are diagnosed, most the time, by medical doctors who are working in private or public clinics. Their reports focus on identifying the degree of hearing loss by using audiogram and other physiologic measures. These reports can be understood by professionals not by the teachers or principals. Unfortunately, the reports do not educationally define hearing loss; therefore, the educational services needed by those children are not identified and specified. Thus, there is a need to know about the criteria for defining the special needs of students who are deaf and hard-of-hearing. The diagnosis process of hearing loss must be organized throughout The Higher Council of the Disabled Persons Affairs in cooperation with The Ministry of Health, Rational Registry, and The Ministry of Social Development. At the basic school stage, admission to school for students who are deaf and hard-of-hearing requires an official report from the National Centre for Diagnosis of Disabilities or National Centre for Hearing verifying that the student has hearing loss. Nowadays, students who move to the secondary school stage seek admission to the Al-Rajae School for the deaf, because it is the only one that offers secondary education for students with hearing loss. After 2003, The Ministry of Education runs the schools for students with hearing loss; these schools are planning for establishing secondary stage and expand the admission. On other hand, students who are not been admitted have to try regular schools or find career training agencies where they can develop some vocational skills.

#### **Psycho-educational assessment**

The psycho-educational assessment process is left to the classroom teacher who attempts to identify the unique student's needs. These teachers do not have the skills needed to carry out this process. They maintain that many of students with hearing loss enter school without basic skills in sign language, language and speech training, and audiological rehabilitation. Also, the assessment process takes place in an inadequate environment as well as using inadequate assessment instruments without modifications needed. Mostly, they used tools and procedures appropriate for hearing students because of their preparation. Consequently, the psycho-educational assessment is conducted by not well-trained personnel who used direct observation of students in the classroom, interviews with parents, and case study in gathering the data, reviewed documents of personnel qualifications and their statements about their experiences in special educational programs to students who are deaf and hard-of-hearing.

The assessment addresses hearing, visual, literacy skills, socio-emotional development, and speech and language development. In addition, there are no other standardized data collection instruments. On the other hand, teachers of students with hearing loss lack appropriate assessments which are not available at The Ministry of Education level. Generally speaking, assessment in these schools is not different from that practiced in schools for hearing students, because most of the teachers who teach at these schools come from regular schools, from 30 selected teachers 24 of them come from regular schools. When the teachers asked about the students' profiles, they do not show any kind of documentations in the descriptive profile, especially for the current level of performance of students with hearing loss in many domains of extended curricula because of missing team work in assessment and programming.

Subsequently, the standard assessment process of students who are deaf and hard-of-hearing is missed and still much has to be done to obtain useful assessment. This statement was stressed by interviewed teachers who agreed that do not have skills needed in the area of assessing psycho-educational aspects of hearing loss. That means, those teachers are able to respond to the special needs of deaf and hard-of-hearing students.

### **Program content**

Students with hearing loss study the same curricula as hearing students and have the same educational cycles. The instructional environment must be based on the visual field. Unfortunately, the curricula adjustment is not executive, for example, at basic grade three students with hearing loss have to study 'unit of sound' at the science curriculum in response to curriculum requirements and the teachers must follow the regulations of The Ministry of Education. The selected teachers and principals who were interviewed surprising when The Directorate of Special Education delete the math curriculum of the second secondary class. Furthermore, the content of individualized education plans (IEPs) is planned unsystematically because the teachers are not well trained in this domain. Due to limited efforts related to extended curricula, the planning and implementing extended curricula are generally inadequate and met the unique needs of this group of pupils. The interviewed teachers reflected their interests to participate in workshops and in service training in order to develop and acquire skills needed for working with this population. In addition, they blamed the responsible persons at The Ministry of Education level for not developing their skills and the lack of information about the hearing loss.

### **Instruction process**

Most of the teachers who teach at schools for students who are deaf and hard-of-hearing come from regular schools. Those teachers suffer from the lack of basic skills necessary to make curriculum adjustment and participating in assessing these pupils. Because of their preparation programs at universities where they graduated, they are qualified for teaching regular or hearing students not deaf and hard-of-hearing students, in other words, those teachers are prepared and trained to be regular teachers not special education teachers. Interviewed selected teachers indicated that they are not qualified and skilled to teach students with hearing loss because they cannot modify the content of the curriculum, develop the language and produce speech with their deaf and hard-of-hearing students, and control the behavior of the students inside the classroom. On the other hand, schools for students with hearing loss are not appropriately designed and equipped. Most schools existed in normal building designed for housing and don't have facilities needed by students with hearing loss. Selected principals who were interviewed stated that they need special designed schools equipped with isolation and visual instructional tools. Assessing student achievement in various subjects carried out by using written tests and a teacher is asked to read questions to students by using total communication. Unfortunately, some teachers agree that they misunderstood their students because of a problem in understanding the signed using throughout exchanging communication.

### **Supervision**

Interviews with selected teachers, principals, The Directorate of Special Education, and reviewed related documents related to educational programs of students who are deaf and hard-of-hearing revealed that The Directorate of Special Education does not offer any kind of supervision to teachers who are working at schools for students with hearing loss. One teacher said: "I do not know if I do write in teaching my students, nobody supervises me" another: "I do not know how to right the daily lessons to my students because nobody tells me how to do it for students with hearing loss". Interview with the Director of The Directorate of Special Education maintained what teachers had said: "The Directorate of Special Education does not offer supervision for teachers of students who are deaf and hard-of-hearing". Furthermore, when the Director of The Directorate of Special Education asked about the goals of the Directorate, he said: "we do not have written goals for the Directorate".

### **Instructional materials and equipment**

According to The Directorate of Special Education at The Ministry of Education, each school for students with hearing loss is equipped with only one F.M. equipment, and computer lab, as well as one overhead projector. This equipment was not used for instructional purposes. On the other hand, all hard-of-hearing students at their schools were fitted with hearing aids, but unfortunately they did not receive audiological rehabilitation to achieve best benefit from them, they wear it and try to use it according to short instructions delivered by the specialist. Despite the schools suffering from the lack of financial supports necessary for meeting these concerns; schools are responsible for the availability of instructional materials. The majority of teachers who interviewed in the field indicated that their schools not adequately equipped and the facility was not appropriate. Field observations confirmed this note.

### **School facilities**

Even with these schools there is much to be done in providing students with hearing loss with appropriate facilities needed. These schools are placed in the most populated cities, and the number of students admitted to schools is limited, which means that students have to wait for a long time for admission. These 10 schools are still suffering from the lack of financial support, sound isolation, modified instruments, and visual equipments. Therefore, they are not fitted enough with equipment necessary for educating this group of students. On the other hand, these schools are located in regular buildings not designed for educating students who are deaf or hard of hearing, and because of this the teachers cannot manage and arrange the desks at the classrooms. These desks are arranged in a way that can suitable for hearing students. While students who are deaf and hard-of-hearing require semicircle position arrangement in which can all students see the teachers and instruments used during the lesson.

### **Professional development**

The vast majority of the teachers who teach at schools for students who are deaf and hard-of-hearing come from regular schools. These teachers are prepared and trained to be regular teachers and not special education teachers. Most teachers indicated that they don't receive sufficient in-service training and support and supervision. The supervision process is more inspection than giving direct instructions and corrective feedback. Some teachers said: "the supervisor inspects what we wrote on papers with no comments", "the supervisor says everything is O.K.", and "we do not know if our teaching is right". It is clear that these teachers felt that supervision should mean more than the inspection of paperwork. This is because of a lack of qualified supervisors. On the other hand, most teachers maintained that they were not aware of validated and effective teaching practices used with students with hearing loss. Furthermore, most the interviewed teachers explained their needs in areas of writing IEPs, teach language, speech production, and monitor of students progress.

### **Roles and responsibilities of personnel**

Most teachers indicated that they were not aware of their roles and responsibilities. In Addition, there were no clear regulations and policies clarify and identified the relationships between and the schools for deaf and hard-of-hearing and The Ministry of Education. For example, The Ministry of Education sends to these schools regulations concerned for regular schools, and administrators of schools for students with hearing loss expressed their displeasure with these procedures. The principals of these schools call for creating new regulations that organize the relationship between the schools and The Ministry of Education, and clarify the roles of the teachers and all who work with students who are deaf and hard-of-hearing, in this regard one principal said: "there 10 schools for students with hearing loss in Jordan belong to the Ministry of Education, why there are no regulation and instructions specify and organize the relationship between these schools and the Ministry?".

### **Family participation**

Despite the important role of the family involvement and exchanging information about the student's progress, the interviewed teachers and principals expressed their hopeless feeling about the relationship between them and the families of students who are deaf and hard-of-hearing. The vast majority of these teachers and principals were described parents' involvement at the minimal level from the teachers' perspective. They said: "we send many invitations to the parents, but nobody comes", and "many parents do not ask about their children", and "the school year start and end with no visit to school from many children parents". Therefore, the parents are not participated in making educational decisions related to their children with hearing loss.

### **Programs evaluation**

The Directorate of Special Education and the schools for students with hearing loss lack of screening and diagnostic tools, modified instructional materials, and formal assessment instruments used with students who are deaf and hard-of-hearing. Furthermore, the assessment process takes place in an inadequate place and without adaptations needed. The persons who are carrying out the assessment not specialist in the field of hearing loss as well as do not know hearing characteristics and the type of curricula needed, reviewing personnel qualification documents maintain this conclusion. Despite The Ministry of Education runs the schools for students with hearing loss, The Directorate of Special Education did not conduct any type of program evaluation to ensure quality services for students with hearing loss. For example, The Directorate of Special Education at The Ministry of Education supplies students who are deaf and hard-of-hearing with hearing aids format least 4 years ago, and no study carried out to examine the effectiveness of this service.

In addition, there is no study that explains the type of curricula modifications needed for this population. Thus, the ongoing assessment is not carried out, so the quality of the services is not improved.

*To what extent do special educational programs of students who are deaf and hard-of-hearing in Jordan meet the Jordanian national standards related to the education of students with hearing loss?*

To answer this question, the investigators used the adapted standards related to the education of students who are deaf and hard-of-hearing that prepared by El-Zraigat (2008). These standards were developed through four steps: the first step of preparing the standards was the pilot study which focuses on obtaining information about deaf and hard-of-hearing special educational programs in Jordan. The second step consisted of reviewing the related literature of standards of educational programs offered for students who are deaf and hard-of-hearing. In the third step, the investigator prepared the standards and discussed the final draft of the standards with the key persons at The Ministry of Education in Jordan presented by The Directorate of Special Education and D.C.U. Unit. The final step, distributing the standards related to the special educational programs of students with hearing loss among the expert (judges) in order to the content validity. The content validity was based on asking 10 experts to evaluate the standards with specific directions to make their judgments depending on two major questions: are the dimensions related to special educational programs offered to students who are deaf and hard-of-hearing? Are the items of standards of special educational programs of students who are deaf and hard-of-hearing related to section they put in? The items were accepted by the experts and were used in the present study. This process produced a matrix of standards consisting of 108 sub-standards divided within ten core standards and is as follows:

**Table 1. Core standards and number of sub-standards of special educational programs of students who are deaf and hard-of-hearing adapted by The Ministry of Education in Jordan.**

Core standards	Number of sub-standards
Identification and referral	7
Assessment of student's needs	17
Instructional content and practices	9
Planning and managing the teaching and learning environment	28
Managing students social interaction skills	6
Communication and collaborative partnerships	7
Educational program policies and regulation	15
Teacher qualifications	7
Family involvement	10
Community involvement	2

Meeting of special educational programs offered for students who are deaf and hard-of-hearing in Jordan with adapted standards by The Ministry of Education was achieved throughout three levels as follows: consistent, partially consistent, and not consistent. The following table shows the benchmarks of special educational programs offered for students who are deaf and hard-of-hearing in Jordan with adapted standards by the Ministry of Education:

**Table 2. Meeting of special educational programs offered for students who are deaf and hard-of-hearing in Jordan with adapted standards by the Ministry of Education**

Core standard	consistent	Partially consistent	Not consistent
Identification and referral		X	
Assessment of student's needs		X	
Instructional content and practices			X
Planning and managing the teaching and learning environment			X
Managing students social interaction skills		X	
Communication and collaborative partnerships		X	
Educational program policies and regulation			X
Teacher qualifications			X
Family involvement			X
Community involvement			X

## **Discussion and recommendations**

The education of students who are deaf and hard-of-hearing in Jordan are organized into three basic parts: (a) general or regular teachers who were prepared to teach non-disabled or regular students and they mostly teach in regular schools supervised by the Ministry of Education, (b) study the same curricula and have the same educational cycles as hearing students, (c) study at schools not prepared and not designed for deaf and hard-of-hearing students.

Concerning using material and equipment in educating deaf and hard-of-hearing students, unfortunately, this equipment was not adequate and not used for instructional purposes. In this way, the selected teachers maintain that they need special workshops in the field deaf education in order to improve their teaching performance, that means, schools and the teachers were not innovative and effective in teaching this group of students, in other words, those who assume the responsibility for educating these pupils are unable to respond to their unique needs. Therefore, those teachers must have training and must meet the criteria of teachers of deaf and hard-of-hearing students. Since the schools are responsible for the availability of skilled teachers and instructional materials, it must make more effort in training the teachers, specially providing access to technology, because we know that technology has the potential to help teachers become innovative and use more effective teaching methods, thus positively impacting the time spent in learning for both teachers and students.

As the results indicate, students who are deaf and hard-of-hearing need modified curricula reflecting their special needs as exceptional learners. Furthermore, facilities must offer curricula meeting their developmental tasks. Different studies points out that there are differences in the educational needs of students who are deaf and hard-of-hearing and hearing students (El-Zraigat, 2007, 2010; Livingston, 1999; Naiman, 1979; Syverrud, Guardino, & Selznick, 2009). Thus, these group of students must be taught by well trained teachers and receive their education at schools fitted with facilities needed. As previously mentioned, students who are deaf and hard-of-hearing are considered learners in need of special support. Consequently, they need special educational programs that address their unique demands. Those students require audiological rehabilitation, speech production, language curriculum, assistive hearing devices, isolated and equipped schools, and modified educational curricula. Many studies stresses the special needs of students who are deaf and hard-of-hearing such as: social curriculum (Naiman, 1979), evolving parents (Hintermair, 2006), involving the students themselves to determine their extent participation (Wingerden, 2003), and be taught by qualified and skilled teachers (Johnson, 2004). In summary, the process of educating students who are deaf and hard-of-hearing in Jordan is not adjusted or not able to meet the special demands of this group of students.

Based on the findings and the discussion of this study, the investigator recommends the following strategies to enhance the process of educating students who are deaf and hard-of-hearing in Jordan: supply The Directorate of Special Education at The Ministry of Education with formal assessment tools and diagnostic tests that can be used to determine academic difficulties of students with hearing loss, especially in reading, writing, and speech and language problems; provide the schools for students with hearing loss with remedial and educational programs designed to meet the special academic needs of the students; adjust the instructional process and classroom environment; use visual clues and demonstrations in teaching process; help students to develop their communication skills; supply students with sufficient time and optimal acoustic environment in order to enable them execute their daily activities; establish especial schools for students with hearing loss and because of the field observations maintain that there is lack of kindergarten in the selected schools, the recommended schools may include kindergarten for young children with hearing loss, division for hard-of-hearing students, and division for deaf students; train teachers of students who are deaf and hard-of-hearing on area of speech production, curricula adaptation, teaching methods, classroom management, and assessment of deaf and hard-of-hearing students; issue regulations that identify the roles and responsibilities of teachers work in the schools for students with hearing loss; involve the parents of students with hearing loss in the educational decisions; and finally, conduct program evaluation to ensure quality of services delivered for deaf and hard-of-hearing students.



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