

chapter 15

Disability Studies in Inclusive Education

Curriculum adaptation for children who are D/deaf or hard of hearing

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Chapter learning outcomes

After completing this chapter, you will be able to:

- ✓ Communicate effectively and respectfully with members of the D/deaf community by using appropriate terminology that reflects an understanding of their linguistic conventions, culture, perspectives, values, beliefs and experiences.
- ✓ Develop an understanding of teaching strategies and accommodations that promote inclusive learning environments to address D/deaf students' difficulties with auditory processing, speech perception and language development.
- ✓ Apply teaching strategies for inclusive learning in their own educational context for learners who are D/deaf or hard of hearing.
- ✓ Describe advantages and disadvantages of different approaches to educating children who are D/deaf or hard of hearing.
- ✓ Analyse how the principles of Universal Design for Learning (UDL) can be used to create conducive learning environments for learners who are D/deaf or hard of hearing.

Preparatory activities



WATCH: Top 10 tips for teachers of students with hearing loss

Creator: ESC Region 13

Date: 2017

Duration: 3 minutes

While watching this clip, write down the 10 tips mentioned by the speaker. Reflect on your own or previous classroom experiences and select five of the tips that you relate to in your or context. Using bulleted short sentences, jot down why you feel these should or should not be done or used, and what you could do in your environment.

**WATCH: Signs for a good education****Creator:** Human Rights Watch**Date:** 2013**Duration:** 6 minutes

Like all other children, children who are D/deaf or hard of hearing have a right to quality education in a language and environment that maximises their potential. In this video, Human Rights Watch show some of the challenges faced by children who are Deaf, and the opportunities sign language offers to overcome these challenges.

Watch the video and jot down the tips the presenter gives on practically accommodating learners with hearing impairments in your classroom.

**WATCH: Our school experiences as Deaf children****Creator:** Carmen Kuscus & Ntombosindiso Majibana**Date:** 2021**Duration:** 16 minutes

Introduction

In this chapter, we look at the linguistic and cultural factors relating to hearing impairment, focusing on how each child is unique, and how these factors are not only linked to the degree of hearing loss a child may have. We also look at communication choices and how these are influenced by when the child became D/deaf or hard of hearing. After this, the differences between people who identify as being “Deaf” with a capital “D” and those who call themselves “deaf” or “hard of hearing” will be explored. The social and emotional effects of hearing impairment on learners within the schooling environment is then examined. Information on how hearing impairment affects a child’s ability to learn is shared and practical ideas on accommodations are given.

We then move on to examine strategies teachers can adopt to better meet the needs of children with hearing impairments, including adaptations to the curriculum designed to support more appropriate approaches towards teaching, learning and assessment. It then includes a summary



of Universal Design for Learning (UDL)'s three principles relating to engagement and motivation, representation and action, and expression. Moving on from this, we focus on practical strategies, assistive devices and accommodations that teachers can use to better support the needs of children who are D/deaf or hard of hearing in their classrooms. To conclude, we explore the importance of getting to know the individual strengths and needs of each learner and using this information in your planning, teaching and assessment.

Linguistic and cultural factors relating to hearing impairment

It is important to know that not all children with hearing impairments are the same, and that there are important linguistic (language) and cultural factors that are not always linked to the amount of hearing loss a child may have. Many people also think that children who follow an oral/aural communication approach have more hearing than those who use sign language. This is not always the case; instead, it has to do with communication (signed or spoken) and cultural affiliation (hearing or Deaf) that the parents choose for their children. A big factor influencing the communication choice also relates to when a child lost their hearing (at birth or after birth), as well as parent communication choice. Children who were born hearing and lose their hearing after they have heard speech and can talk, may find an oral/aural approach easier than those who have never heard spoken language. If a child's parents select a cochlear implant or hearing aids, they are more likely to follow an oral/aural approach to communication.

People who identify as being “Deaf” (with a capital “D”) use sign language as their primary means of communicating, socialising and identifying with other people who are Deaf. They may have attended a special school for children who are Deaf where sign language was used as the medium for teaching and learning. People who are Deaf are proud to be Deaf, socialise with other people who are Deaf, and identify with shared Deaf experiences and culture. People who are Deaf do not consider themselves as being disabled, but rather as members of a linguistic (using sign language), cultural (part of Deaf community and its culture) minority group. They feel that if hearing people understand and use sign language, and acknowledge Deaf culture, then there are no barriers ([Higgins & Lieberman, 2016](#)). This is in line with the social model of disability where the environment creates the disabling barriers rather than a person's impairment.



There are other people with hearing impairments who define themselves as being “deaf” (with a small “d”), hearing impaired or hard of hearing. People who are deaf rely on spoken language and lip-reading as their primary means of communication. Children who are deaf or hard of hearing may either attend oral/aural (speaking) special schools where no sign language is used or mainstream schools with hearing children. They may use assistive devices such as cochlear implants or hearing aids to help them with speaking and hearing. Teachers in these schools might use FM systems (wearing a microphone that transmits what they say directly to the child’s hearing aid, etc.) People who are deaf or hard of hearing typically socialise with hearing people within hearing communities and culture/s and would identify as being disabled (**McKinney & Swartz, 2016**).



WATCH: Understanding Deaf culture and community

Creator: Jabaar Mohamed

Date: 2021

Duration: 11 minutes

Social and emotional effects of hearing impairment on learners

For children who identify as being Deaf, schools for the Deaf can be important places for meeting and socialising with other children and Deaf adults who have a shared understanding. This builds their identity as being part of a Deaf community, following Deaf culture norms and communicating through sign language. With over 90% of children who are Deaf being born to hearing families, most of whom have never met a person who is Deaf and are not fluent in sign language, socialising and being educated with other children who are D/deaf or hard of hearing is important in developing their Deaf identity, sense of belonging and confidence. However, not all teachers working in schools for children who are Deaf are fluent in sign language, which can create a barrier. Many children who are D/deaf stay in school hostels and feel isolated and excluded when they return to their families and communities where they do not understand or use sign language (**McKinney & Swartz, 2016**).

Some children who are deaf or hard of hearing attending mainstream schools are bullied and teased by hearing children or teachers. Not all teachers understand the needs and accommodations that children with hearing impairments require, while others are not diagnosed as having a hearing impairment. Some children who are deaf or hard of hearing become disruptive as a result, or withdraw and become isolated, falling behind hearing children.



It is thus important that teachers understand the needs of children with hearing impairments, and what they can do to practically accommodate them in their classes, regardless of whether this takes place in a special school or in a mainstream school.

How hearing impairment affects learning

While some people identify as being culturally and linguistically Deaf and others as deaf or hard of hearing, having a hearing impairment may impact on a child's learning. Children with hearing losses will not be able to pick up general knowledge through hearing what people around them are saying or what is being spoken about on the news, for example. Acquiring spoken language for learners following an oral/aural communication approach may be at a slower pace, and there may be a delay in the development of receptive and expressive communication skills (speech and language) than hearing learners. This means that they have to spend a great deal of effort and energy reading hearing-people's lips, facial expressions and body language to try understand what is being said or communicated. Even children who use sign language can feel tired from having to rely on watching all day, as opposed to hearing children who can hear what the teacher is saying without having to look at their mouth to lip-read.

Learners who communicate in sign language may find challenges with reading and sentence structure. This is because there is no written form of sign language, and they will have to read and write in a spoken language such as English, which has a differing word order to sign language. Many children with hearing impairments do not have the same general and incidental knowledge and language that their hearing peers who can access information from hearing others speak around them have ([Knors, 2016](#); [Marschark et al., 2014](#)). In addition, many children with hearing impairments in mainstream settings feel isolated and excluded from their hearing peers which can lead to social isolation and poor self-concept.

Teaching and learning may therefore take longer, as teachers need to face children at all times (they cannot write on a blackboard and speak at the same time), students cannot rely on the use of phonics to sound out words when learning to read, and children cannot write and follow what a teacher is saying or signing at the same time. Most children with hearing impairments require additional visual input to supplement what they may be missing because they cannot hear.



WATCH: Making education accessible to deaf children

Creator: Nyle DiMarco

Date: 2018

Duration: 14 minutes



Adapting the curriculum to meet the needs of children with hearing impairments

In order to meet the educational needs of learners who are D/deaf or hard of hearing, we need to ensure that if required, we make adaptations to the curriculum including what we teach, how we teach and assess, as well as the activities we select in our teaching and learning. The curriculum is what is learned and what is taught (context), how it is delivered (teaching-learning method), how it is assessed (for example, assessments), and the resources and materials (such as textbooks and posters) that are used to deliver and support teaching and learning in the classroom (Perner, 2004).

We know that all learners are unique and that no two learners learn in the same way. If we follow the principles of UDL, we can better meet the needs of all learners in our classrooms. We also need to make sure that all learners are present (physically attending school), participating (actively learning and participating in all areas of school including class activities as well as extra curricula activities), and achieving (not just in integrated into school but developing, learning and thriving).

As discussed earlier, there are three principles of UDL. These are:

Engagement and motivation (Why are we learning?): We need to ensure that we make learning interesting (through using a variety of different teaching methods, materials and activities especially those that make use of the visual modality), keep their attention, and assist them in regulating their own learning. We want children to be interested and motivated in their own learning. For children with hearing impairments, using more picture-based materials, such as drawings, diagrams and photographs, should be encouraged. We need to give learners options and ensure that the examples we use are relevant to their lives and interests.

Representation (What are we learning?): We need to ensure that once the learners' interests and motivations are piqued, they are ready to learn the content. Learners perceive and comprehend information differently. We therefore need to make the information we give them accessible by using sign language or providing subtitles when sharing videos, so as to support learners' comprehension in a way that is most suitable for them. Other strategies include scaffolding or removing unnecessary distractions not directly related to what they are learning.



Action and expression (How are we learning?): In order for learners to demonstrate what they have learned, we need to support physical interaction with learning materials (such as through the use of physical counters when teaching mathematics in the foundation phase), encourage different means of expression (such as through drama or drawing images), and help learners with “executive” functions (such as comprehension). For example, in order to assess a child’s understanding of a concept, you could ask them to draw an image and explain it to you using sign language or by labelling the image.



WATCH: Universal Design for Learning

Creator: Christina Yuknis

Date: 2019

Duration: 38 minutes



WATCH: Deaf and hard of hearing students in the classroom

Creator: Rebecca Fuller

Date: 2015

Duration: 7 minutes

In this video, you will see some practical ideas on how you can support learners in your classroom. Jot down three things that surprised you, three things that were new to you and any strategies that you might use in your classroom.

Strategies that can support students who are D/deaf or hard of hearing

Now that we have looked at how we can adapt the curriculum to meet the needs of children with hearing impairments, we need to look at some strategies that we can use to better support their needs.



No matter what communication method a child uses, there are some strategies that can support children with hearing impairments in the classroom (Kelly et al., 2022). This can be done through ensuring that the classroom and school environment do not create barriers. We as teachers also need to differentiate the curriculum content that we teach, adapting the instructional strategies we use as teachers, the instructional materials we select, as well as our assessment practices, making sure these are appropriate and suitable to learners who are D/deaf or hard of hearing to better meet the needs of the learners in our classroom.



READ: Support to address barriers to learning for learners who are deaf

Author: Peter Mapepa & Meahabo D. Magano

Year: 2018

Estimated reading time: 20–30 minutes

File size: 854 KB

Suitable classroom layout and seating arrangements

Children with hearing impairments should ideally be seated in classrooms that are laid out in a horseshoe or semi-circle formation. This will result in children being able to see each other as well as their teacher, which is vital for lip reading as well as following sign language.

Suitable lighting

Having good lighting in a classroom is vital for both lip reading as well as for following sign language conversations. If a child cannot see people's faces or lips, communication is challenging. The source of the light is also important. Light needs to shine on a person's face and not from behind the speaker or signer (this is called silhouetting). Silhouetting means that the speaker's face is not clear, which can hurt the lip reader's eyes and increase their fatigue or result in lack of concentration.

Reduce noise

The sound of scraping chairs when children sit down or stand up as well as banging classroom doors and corridor noises can become very distracting and painful for children with hearing impairments, especially those using assistive devices such as hearing aids that amplify noise. You can buy cheap rubber stoppers to place under chairs, glue small carpet offcuts under desks and chairs, or try to use carpets to absorb sound.



Limit distractions

Children with hearing impairments rely on their vision to access information. As a result, they are very aware of what is happening around them. It is important to limit classroom movement and to close doors where possible because as soon as someone walks past a child with a hearing impairment, they automatically look and will miss out on what the speaker or signer is saying (hearing children can do this easily as they can still hear what the teacher is saying, but children with hearing impairments cannot).

Involve the learner in decisions and choices

Most often, children with hearing impairments (especially older children), will know what works best for them and what they need in the classroom setting. With younger children, ask their parents or caregivers what works for them in their home or outside of school environments. You can also speak to previous teachers and find out what they found helped that child previously.

Encourage interaction with deaf role models

With over 90% of Deaf and hearing-impaired children coming from hearing families, it is important that they meet other people who are successful or that can act as positive role-models. This may be through clubs, societies, sporting events or social events such as through Deaf organisations such as DeafSA or cochlear implant support groups.

Assistive devices and accommodations

Some children with hearing impairments will benefit from assistive devices and accommodations in the classroom and school environment. All children with diagnosed hearing impairments can apply for additional time for assessments and examinations. Some children find writing their examinations or assessments in a separate venue where they are less distracted beneficial; while others are provided with a scribe, note-taker or given the option to complete an “oral” rather than written assessments, depending on what is being assessed (Kelly et al., 2022; McKinney & Swartz, 2022).



For children who are Deaf, it is vital that teachers are fluent in sign language and understand Deaf culture. If this is not possible because the teacher is new, for example, then it is important that a sign language interpreter is used (**Knors, 2016; McKinney & Swartz, 2016**). It is also important that teachers understand and follow the bilingual bicultural model when teaching children who are Deaf. Here children are taught through sign language as their primary means of communication, with a spoken language such as English being introduced for reading and writing (not for speaking). In addition, children are taught about both Deaf as well as hearing cultures (**Knors, 2016; Marschark et al., 2014; McKinney, 2019**).



READ: The effect of limited sign language as barrier to teaching and learning among Deaf learners in South Africa

Author: Winnie Poelane Ngobeni, Joseph Ramathibela Maimane & Mmushetji Petrus Rankhumise

Year: 2020

Estimated reading time: 20–30 minutes

File size: 290 KB



WATCH: Offer deaf children education in sign language

Creator: Human Rights Watch

Date: 2018

Duration: 6 minutes

For children using an oral/aural communication method, having access to technology such as hearing aids, cochlear implants or FM systems is important. However, it is important to note that younger children might need help with testing and charging their assistive devices and cannot swim or play contact sport while using these devices (**Marlatt, 2014**).

Find out what works

All children have differing strengths and needs. The more you get to know the children in your class, understand their interests and difficulties, the better prepared you can be – and the more able to meet their learning needs. See what assistive devices, reasonable accommodations, materials, equipment and resources you can use to enhance their learning.



However, it is also vital that we as teachers assist learners who are D/deaf or hard of hearing with their personal and social development as well as their academic development. This would include areas such as identity and personality, social integration and social skills, social status and roles, emotional development, self-esteem and self-confidence, self-efficacy, and, lastly, love and belonging (Skrebneva, 2015). Adults who are Deaf or deaf can act as positive role models for learners who are D/deaf or hard of hearing and can be useful resources to teachers as they have experienced the challenges facing learners first hand and may be able to offer recommendations on classroom adaptations.

Conclusion

In this chapter, we have demonstrated that children who are D/deaf or hard of hearing are unique and have a right to quality education in a language and environment that maximises their potential. There are many linguistic and cultural factors that influence the lives and the learning process of children who are D/deaf or hard of hearing, may have social and emotional effects on learners within the schooling environment.

While hearing impairment may affect a child's ability to learn, there are many techniques and practical accommodations that teachers can use to help children in their classrooms. It is, however, crucial that teachers get to know the individual strengths and needs of each learner and use this information in their planning, teaching and assessment.

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