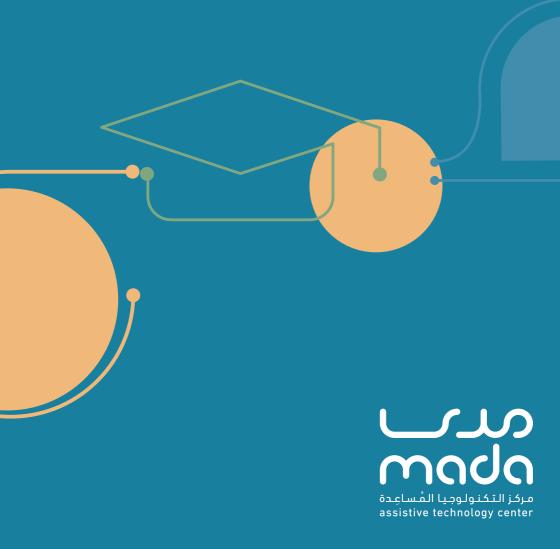
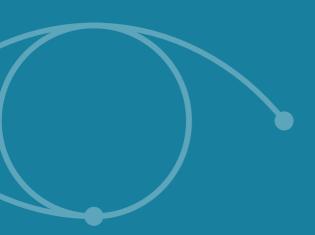
Educational Best Practices for Deaf Students

An Executive Guide for Policy Makers





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Educational Best Practices for Deaf Students

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About This Report

This report was developed by Mada in conjunction with international experts in the field of accessibility for the Deaf community. The report seeks to profile the current provision within Qatar for Deaf pupils, along with discussing best practice from around the world. It is designed to point the way to ensure Qatar is offering high-quality and appropriate support, based on leading pedagogical techniques and technological implementation.

Introduction

At the outset, it is worth noting the two prevalent models are used when discussing 'deafness': the social and medical models. In the social model, deafness is seen as a linguistic and cultural identity - with disability being caused by society's rigidity in making accommodations. Individuals are referred to as 'Deaf', indicating their membership of the Deaf Community. In the medical model, deafness is defined as a disability in a person's inability to hear, and as something to be overcome. When discussing the spectrum of individuals as a homogenous group, the term Deaf shall be used.

It is important, therefore, to identify deafness within the social model, understanding that the inability to create accessible learning spaces is the primary reason behind the marginalization of the Deaf community in classes worldwide.

In general, disability, even when understood within the social model, is one of the most potent factors in educational marginalization. Students with disabilities are more likely to come from socio-economically disadvantaged backgrounds compared to the rest of the population. This creates a double disadvantage as those with disabilities, coupled with lower socio-economic status, are more likely to be placed in special school settings, outside of the mainstream.

Some form of disability affects over four in five persons living in developing countries and 93 million of them are children under the age of 14 living with a 'moderate or severe disability'. Despite these rough numbers, there is a severe lack of concrete and accurate data showing the true scale of discrimination worldwide and on a national level. This is even more the case for education related data, as there is only little information regarding persons with disabilities. Approximate figures show that the situation is worrying with about 62 million children at primary school age having a disability around the world and 186 million children with disabilities who have not completed primary school education.

World Health Organization and World Bank, World Report on Disability, 2011, p. xi, accessible at: http://whqlibdoc.who.int/publications/2011/9789240685215_eng.pdf?ua=1

International Labour Organization, 2007, Geneva, p. 1, accessible at: http://www.ilo.org/wcmsp5/groups/public/-

⁻⁻dgreports/---dcomm/documents/publication/wcms_087707.pdf and FAO expert Libor Stloukal, FAO Newsroom, 2006, Rome, accessible at: http://www.fao.org/newsroom/EN/news/2006/1000453/index.html

World Health Organization and World Bank, World Report on Disability, 2011, p. 205, accessible at: http://whqlibdoc.who.int/publications/2011/9789240685215_eng.pdf?ua=1

UNESCO, Empowering persons with disabilities through ICTs, p. 5, 2009, Paris, accessible at:

Early intervention plays a key role in supporting children with special educational needs, and can make a significant difference in a child's future. Technology supports students with disabilities to overcome barriers in educational access, participation, as well as markedly improving their learning progress. Therefore, it is essential that education policy reflects the critical role of Assistive Technology in ensuring an inclusive education sector.

Knowledge is a key driver of social and economic development. It helps shape individual and collective identity and can be a tool for empowerment and inclusion. Its production, dissemination and acquisition continue to gain currency in our information-rich society, and economic growth is increasingly determined by society's capacity to transform learning outcomes into quality goods and services. In this context, disparities in capacity to access and use knowledge can greatly hinder the development of an inclusive society and become a significant source of inequality.

While important progress has been made through assistive technologies and accessibility standards, persons with disabilities are still at risk of exclusion, from education in particular. Rapid changes in the fields of consumer technology and publishing, however, are transforming the educational ecosystem and the growth of digital and multisensory resources provides a unique opportunity to cater for the needs of millions of individuals who are unable to access printed material. Provided they are used appropriately and according to agreed standards, emerging ICTs can help overcome visual impairments, physical disabilities, or learning differences and greatly enhance access to knowledge for all.

The inclusion of children and adults with disabilities in education is important for four main reasons.

- Education contributes to human capital formation and is thus a key determinant of personal well-being and welfare.
- 2. Excluding children with disabilities from educational and employment opportunities has high social and economic costs. For example, adults with disabilities tend to be poorer than those without disabilities, but education weakens this association.
- 3. Countries cannot achieve Education for All or the Millennium
 Development Goal of universal completion of primary education
 without ensuring access to education for children with disabilities.
- Countries that are signatories to the United Nations Convention on the Rights of People with Disabilities (UNCRPD) cannot fulfil their responsibilities under Article 24.

World Health Organization and World Bank, World Report on Disability, 2011, p. xi, accessible at: http://whqlibdoc.who.int/publications/2011/9789240685215_eng.pdf?ua=1

International Labour Organization, 2007, Geneva, p. 1, accessible at: http://www.ilo.org/wcmsp5/groups/public/-

⁻⁻dgreports/---dcomm/documents/publication/wcms_087707.pdf and FAO expert Libor Stloukal, FAO Newsroom, 2006, Rome, accessible at: http://www.fao.org/newsroom/EN/news/2006/1000453/index.html

World Health Organization and World Bank, World Report on Disability, 2011, p. 205, accessible at: http://whqlibdoc.who.int/publications/2011/9789240685215_eng.pdf?ua=1

UNESCO, Empowering persons with disabilities through ICTs, p. 5, 2009, Paris, accessible at:

Deaf Education in Qatar

History

Before the specific Qatari context can be appreciated, it is worth noting the approach to Deaf education, and the wider special needs provision, within the Arab region. Special needs schools have existed in the Arab region since the late 19th century, with special needs schools being established as segregated institutions, which operated in Egypt from 1874-1888. This drive was built on and developed through the 20th century, with European expatriates bringing educational and teaching methodology to the region.

Traditionally, the common understanding regarding the Deaf and those experiencing disabilities has been that of seeing these ones as 'weak', 'broken' or 'in need of fixing'. Professor Eman Gaad notes:

"Historically the people of [the Gulf] region have not had a very open and accepting attitude towards those with special needs and disabilities."

Whilst these institutions focused on segregation and focused support, there has been a shift, spurred by UN frameworks, towards mainstreaming special needs students. Qatar, Kuwait and Bahrain have been recognized as leaders in the region in this regard, with large investments in educational hubs and initiatives, such as Qatar's Education for a New Era. Qatar ratified the Convention on the Rights of Persons with Disabilities in October of 2008. Since then, it has made commendable efforts to align itself with current thinking from around the world. Even so, it does still support segregation through many institutions.

Historically, Qatar has followed the widespread approach of segregation due to disability, compounded by segregation-by-gender: in 1975, a class for boys with hearing loss was set up in a public primary school; an all-boys deaf school in 1981; and an all-girls deaf school in 1982. The Audio Education Complex was inaugurated in 1981.

Prior to the establishment of the above center, most Deaf students were sent outside of Qatar, to study in the schools already operating in Egypt or Kuwait. This was not necessarily due to the quality of provision, rather that it enjoyed relatively easy means of transport for students travelling between the two countries and have much in common in terms of language and culture. The field of Deaf education was still an unknown in the region and still carried the cultural stigma of disability. At that time, the nature of deafness, the existence of a cultural identity or the appreciation of sign language was still under-developed in the region.

Since the 1980s, globally, education for Deaf students has worked to make sign language, the rights of the child and cultivation of a cultural identity core elements within a holistic approach to teaching and learning. The Arab region has been slow in adjusting its view, due to cultural misconceptions.

Gaad, E. (2001). Educating Children with Down's Syndrome in the United Arab Emirates. British Journal of Special Education, 28.4, 195-203. Gaad, E. (2011). Inclusive Education in the Middle East. New York: Routledge. Al Attiyah, A. and Lazarus, B. (2007). "Hope in the Life": The Children of Qatar Speak about Inclusion. Childhood Education, 83.6, 366-69.

Sheika Hessa Al Thani, former UN Special Rapporteur on Disabilities has spoken at great length about the need for Arab prejudices to be uprooted. She has made it clear that these attitudes are not Quranically-based, and should be eradicated to allow those with disabilities to be viewed as potential members of society.

This forward movement in recognizing Deaf people and their rights was given further momentum through the Qatari government recognizing Qatari Sign Language in 2001, and backing the opening of the Qatar Cultural and Social Centre for the Deaf (QCSCD) in 2005.

Despite the positive developments mentioned, there was still a long road ahead in terms of building a Deaf Community within Qatar, where Deaf individuals would be afforded the same rights to language and education as their hearing peers. This assertion is lent credence by Sheikha Hessa Al-Thani, the UN Special Rapporteur on Disabilities from 2003-2009, who noted in 2007: "The general condition of children with disabilities in Arab societies is invisibility."

Qatar Sign Language – History and its impact on Education

Sign Language must be discussed in parallel with Deaf education, as it is one of the primary vehicles for educating Deaf children. Across the world, there are oral and sign methodologies, along with bilingualism and other means, which shall be discussed in the next section. To understand and ensure the efficacy of Deaf education, sign language must be appreciated, cultivated and protected. Qatari Sign Language was formally recognized by the Qatari Government in 2001. Four years later, in 2005, the first Deaf center emerged with encouragement from the Government – now known as the Qatar Cultural and Social Centre for Deaf (QCSCD). Currently, they are the only organization representing Deaf people in Qatar, promoting interaction with foreign organizations and providing a central point for the Community.

Sign Language within the Arab region is currently undergoing reform and pressure. Despite the recognition of Qatari Sign Language, there have been efforts to unify sign languages across the Arab region. Reflecting Arabic's use throughout the GCC, many entities have pushed for the creation and promotion of a Unified Arabic Regional Sign Language (UARSL) across all 22 Arab League member countries.

The QCSCD has been a force behind this effort, and sponsored the creation and dissemination of the first UARSL Dictionary in 2011. It is worth noting that UARSL has a defined lexicon but, to date, does not have a defined grammatical framework, so many do not see it is as a 'language' as yet.

In Doha's Audio Complex School, there is a clear 'melting-pot' ideology that is firmly in place. UARSL is used as the sign language of choice and this reflects the national make-up of the student cohort, with representation from across the region. The staff team was also made up of signers from various national backgrounds.

Educationally speaking, one can see possible issues with the cultivation of a fabricated language as a medium for instruction. Language discrepancies could easily result in 'learning discrepancies' and effect achievement and success for the student. Equally, upon leaving the school, their primary language model would not reflect the Deaf community as a whole, either in Qatar or upon returning to their home country.

Due to the promotion of Unified Arabic Regional Sign Language, emphasis has moved away from the cultivation and protection of Qatari Sign Language. There is currently no curriculum in place for the teaching or training in Qatari Sign Language and no formal dictionary exists. The QSCCD has successfully run some grass-roots courses to teach independent individuals UARSL, yet this is taught with no recognized curriculum, no qualified teachers and no training in sign language linguistics. Whilst the efforts are commendable, it is certainly causing confusion and possibly a watering-down of the purity of the sign languages in existence in Qatar.

Sign Language Interpreters in Qatar

According to a study conducted by the WFD in 2008, there were only six interpreters operating in Qatar. Although the findings state that they hold formal qualifications, field research shows that is not the case. There has been no further census of provision since 2008.

To date, sign language interpreters do not enjoy professional status. Leading this change is Al-Jazeera, the international News station, who show sign language interpretation within their feed. This is commendable and their sign language staff are the closest to professionals that exist.

Educators within the Audio Complex have a range of qualifications in sign language. Whilst specifics are unknown, it is clear that many of them have family-connections to the Deaf community of their home country, so possibly do not hold formal qualifications. It is commendable that the Complex has given emphasis to cultivating sign language awareness, through the appointment of a sign language expert within the school.

Teaching Strategies & Language Choice when Teaching Deaf Children

It is important to note at this stage that deafness is not a learning disability in itself. Deafness can have an effect on language acquisition, cognitive development and linguistic ability due to delayed identification and the absence of early intervention. With appropriate intervention and support - which includes early exposure to language - Deaf children can access education and develop on par with their hearing peers.

Sign Language & Spoken Language Development

According to new research published in 2012 by the Deafness Cognitive Research Centre (DCAL) within UCL-London, acquiring sign language from an early age, in addition to spoken or written language, has significant benefits for deaf children:

"The study showed that adults who developed sign language skills from birth had better grammatical judgement in British Sign Language (BSL). Adults who reported learning BSL from the ages of 2 to 8 years found it harder to acquire the same language skills. The research has highlighted that learning both a sign language and a spoken or written language will be the most beneficial for children to make the most of their linguistic abilities."

Whilst exposure to, and acquisition of, sign language from birth is ideal, this is rarely the case internationally. Across the globe, 90% of deaf children are born to hearing parents, with only a small percentage of deaf children being born to Deaf parents. Due to this, most children enter the education institutions with poor and delayed language skills and a home environment where sign language does not exist. Absence of a linguistic framework within the home environment can be severely detrimental to the child's language development, which will impact across his/her social and educational achievement:

"Use of sign language with young children (of any hearing status) is known to promote early communication. The reason for this is that children begin to learn language long before they are physically capable of reproducing speech. While the organs of speech are still maturing, children struggle to find ways of expressing themselves. Given exposure to a visual language of signs, children are able to master language at an earlier stage. Signing children can communicate, while their peers are still in frustrated fits over the inability to tell caregivers what they need or want."

Not only must children be given language at the earliest stages, they should be given the chance to exploit any residual hearing they may have. At this stage, any access to language - signed or spoken - will enable the child to develop at a less-delayed rate than those who are denied access. Intervention and support from the medical and audiological field is paramount, providing hearing-aids and speech and language (SALT) support where appropriate. As the child develops and their needs are better understood, parents can make an informed choice, along with their child, as to communication methods, assistive technologies and such. These provisions should not be withheld at the initial stage, else they are rendered effectively useless later down the line if linguistic, cognitive, social and academic development are hindered.

"The UN Convention on the Rights of Persons with Disabilities of 2008 also calls for enjoyment of all human rights and fundamental freedoms by children with disabilities, and points to the importance of early intervention and their inclusion in the education system from an early age to ensure their visibility and roles in society."

Within the classroom environment, there should be a language-rich environment, where a child is taught in a way that stimulates and develops their language skills. Each child should be treated as an individual and their learning and development plans tailored with a language component. Goals, milestones and strategies should be made part of the overall plan for each student. They should be challenged in a way that allows them to develop speech, sign language and other methods according to each one's ability and stated language choices. Access to fluent signers, support from SALT professionals and underpinning of Arabic/English is vital.

Technological Aids

Intervention through, and the embedding of, technology has undergone a paradigm shift in recent years. Whilst its inception was firmly based in the medical model of deafness - curing, reducing and lessening - a more social model has become popular - supporting, enhancing and complementing. Rather than technology such as hearing aids, loops and cochlear implants being forced on children to 'make' them hearing, a child-centered approach has been adopted, where families and professionals work with the Deaf child to explore all avenues that allow the child to develop.

International Best Practices

This section will discuss various examples of best practice as seen in the UK and US. The following areas shall be discussed: educational environment; approach to pedagogy; transition and; supporting infrastructure.

Educational Environment

To compensate for the lack of language, stimulation and exposure within their home environments, children should be given a language rich environment when at school. Language is not just for instruction:

"Conversation is a uniquely human phenomenon. Analyses of freely forming conversations indicate that approximately two thirds of conversation time is devoted to social topics."

In a language rich environment that makes full and free use of sign language, not only will language itself thrive, but through greater exposure to incidental learning opportunities the Deaf child's world-view will also be expanded. Watching peers and adults interact, seeing social conventions at work - humor, conflict and the myriad uses of language - all this will 'instruct' the Deaf child as to how language can be employed. This type of environment is often referred to as a 'Least Restrictive Environment.'

The Rochester School for the Deaf in Rochester, New York, USA is a sterling example of this. As with most institutions, use of sign language is mandatory when around students and Deaf staff. Yet, they go a step further - in every classroom, rather than a telephone being present for use by the hearing staff (to call colleagues, parents or other adults), there is a videophone. As such, any communication with outside parties is accessible to the Deaf children in the vicinity as it takes place in sign language. This embedding of language in all aspect of the environment allowed children to see different uses of language: requests, complaints, conflict, enquiries - all within a real-world application.

Sign language wasn't just what adults used to teach, it was how the school lived and breathed.

Gallaudet University, Washington D.C was equally impressive. Videophone technology is available throughout the campus, allowing students to call family, government offices, friends - anyone they liked. This freedom of communication is supported by the fact that everyone on campus used sign language. Coffee could be ordered in the cafeteria in sign language, maintenance staff were Deaf or signed, even drivers who serviced the school were expected to use sign language to communicate. Information given to students, announcements around campus, communication with parents was all conducted in sign language, allowing the students in these institutions to access their language in all its forms.

The Model Secondary School for the Deaf, in Washington D.C took special efforts to cultivate sign language and a sense of identity through language in its students. Here, a subject called 'ASLology' had been created which focused on students exploring and analyzing sign language and their personal use of it. This engendered a feeling of pride in the language, in that its complexities, application and varieties rivalled 'hearing' spoken languages. 'Composition' in sign language was taught where students created original works in sign language, ranging from colloquial to formal presentations. 'Analysis' at a grammatical and rhetorical level was taught, allowing students to drill down into sign language and realize its makeup and development. Students were also exposed to sign languages across the world, helping them see that sign languages enable a global community of Deaf people.

Different Approaches to Pedagogy

There are different approaches to teaching Deaf students. Here is a review of the most important ones.

Special Schools

Special Schools are an excellent approach to providing quality education services to Deaf children. These schools take a specialized approach to teaching and learning and are able to create a Least Restrictive Environment that can accommodate a wide variety of communication modes and needs. Sadly, though, these specialist institutions are gradually being closed across the world, as the approach of Inclusion has gained popularity. Whilst it is true that many specialist institutions do not provide a real-world environment where interaction with hearing peers is possible and can thus lead to a lack of readiness for the 'real-world', their value cannot be ignored in providing a strong linguistic, social and cultural foundation for the Deaf child. Gallaudet University is an example of a specialist institution that is seen as a world leader in preparing D/deaf students as strong and capable individuals. Sadly though, many see this institution as perpetuating a false environment for the students that cannot be continued upon graduation.

Inclusion

Inclusion is an approach that aims to bring D/deaf children into mainstream classroom environments with adaptations and services brought into the classroom. The Deaf student would be taught alongside hearing peers, with support from a specialist assistant. This is an approach that has been used widely across the globe, with many specialist Deaf schools closing as a result.

Whilst the goal of this approach is noble - that of bringing the Deaf child into an equal environment and giving them the same learning opportunities - it is often seen as a narrow approach that ignores the differences in cognition and learning of a Deaf child and can result in profound isolation for the child. All teaching takes place as part of the general cohort, relayed through an educational assistant or interpreter, with no direct teaching from the classroom teacher itself.

Mainstreaming

It is now generally encouraged for Education Bodies to recommend mainstreaming in a Least Restrictive Environment. This aims to view the child as an individual and ensure that his or her needs are met in the most appropriate way for that child. This often takes the form of access to a general education classroom, but having separate focused lessons for core subjects that bridge the gaps in learning differences. In this environment, the Deaf student can enjoy direct teaching in sign language and access to education specialists. This approach is also seen to accommodate and support social and cultural factors that cannot be addressed within a general education classroom.

Individualized Education Plans

Individualized Education Plans (IEP) should be created for all Deaf pupils. This is an internationally standard approach that focuses on the student as an individual and creates a framework of support to bring the student from their current performance to identified and agreed-upon goals. This IEP is created through liaison and cooperation from classroom teachers, paraprofessionals, educational psychologists, parents and the child him/herself. Not only is focus given to academic progress and attainment, but also to social and non-academic factors. This is a holistic view that looks at the child as a person who needs to be assisted to develop into a rounded and independent individual, appropriate to his or her levels of ability.

Transition: Academic & Employment

Globally, supporting Deaf students in transitioning from a school environment to the workforce or Further and Higher Education is a challenge. According to statistics, in the UK, between 2009 and 2012, Deaf applications to universities dropped by 45% and this is a growing trend globally. For students that do enter university and successfully graduate, it is extremely difficult for them to compete with hearing peers for jobs, due to a variety of reasons.

In the UK, this difficulty was identified by Deaf Unity, a UK based charity that works towards creating employment opportunities for the Deaf. Since 2010, the organization has done much work to raise awareness and begin a shift in attitudes through its Deaf Learners campaign, and its Deaf Graduates careers event. The approach to this activity was informed by Deaf Unity's research in the USA. It seems that these issues - lack of awareness, barriers, prejudice, lack of inspiration and motivation on the part of the D/deaf learner - are global and not being sufficiently broken down.

In the US, Deaf schools excel in raising expectations of self, and in inspiring young Deaf children to begin seeing themselves as part of a wider Deaf Community, but also to see their potential in interacting with the general society. At the Rochester School for the Deaf, they begin very young in working with youths to identify career paths and areas of interest and providing learning opportunities throughout their development to shape an idea of 'what they want to be.' This is something that is lacking in the UK and in many other countries. Emphasis is placed on students acquiring core skills academically, but when they complete their compulsory education, they are at a loss as what to do for further studies or for employment.

Career interests are placed within the Individualized Educational Plans of the child in the US and internships, day-release exposure and such activities are arranged to keep the child engaged with a 'forward-movement.' Due to the prevalence in the US of specialist further education centers, such as Gallaudet, NTID and others, there is not much assistance given to the Deaf youth when deciding upon their next step academically: it is just assumed that they will go to one of the aforementioned institutions.

In 2014, Deaf Unity held the UK's first national Deaf Careers Event, which brought together Deaf graduates and job seekers, employers, Human and Resource professionals and other invested figures. This was the first accessible opportunity for the Deaf to interact with potential employers and discuss career opportunities, expectations and development.

These programs need to be replicated, further developed and rolled-out internationally to create a more driven and mobile sector of the workforce.

Supporting Infrastructure

Alongside overt strategies to support Deaf students, there can be much that is done outside of the classroom to enable Deaf youth to develop into a rounded and independent individual. The following are a selection of avenues.

Early Detection & Intervention

"Early identification of deafness, combined with effective early intervention, offers the best chance of the language, communication and speech abilities of deaf children developing in line with the developmental pattern and time frame for hearing children."

The reasons for the above are well documented and obvious: if a child cannot hear, they cannot develop language and develop cognitively at the same rate as a hearing child. If their deafness is not identified until much later, opportunities to support that child's development will have been missed. Exploitation of any residual hearing as soon as possible to support the acquisition of language will also have been missed.

It is vital, therefore, that the Ministry of Health of a country have a robust approach to screening of newborns within the first few months of life to identify those with congenital deafness. Awareness also needs to be built into healthcare professionals that the hearing of children who suffer childhood illnesses can be adversely effected, and regular checks should take place.

In the UK, once deafness is identified, a unified approach is followed, with the involvement of: pediatric audiologists; specialist teachers of the deaf working with an advisory service; educational audiologists; speech and language therapists; social workers; community pediatricians; and voluntary organizations. It is through the combined working of these professionals that children detected at an early age can enter Foundation stages of education with little to no delay in language and cognitive development.

Intervention can be varied, depending on the child, the family's wishes and the resources available in the country, but could include: speech and language therapy; access to a Deaf Community; the whole family learning sign language; special teachers of the Deaf; medical intervention through hearing aids or cochlear implants.

Across the globe, there has been much heated debate over the political and ethical issues when talking about physical/medical intervention, and in deciding whether a child should be encouraged to speak or to sign. In the UK, it is now believed that a child should be given every opportunity possible, without permanence, to develop.

As the child develops and is able to exert personal choice, elements can be discarded or taken up with the child fully involved in the decision. Professionals should never, therefore, insist or pressure parents to make decisions that exclude a certain support method.

Family Involvement & Support

It is impossible for any of the techniques, approaches or methodologies to succeed without the full commitment and involvement of the families of a D/deaf child. With 90% of the world's deaf children being born to hearing parents, empathy and support for the family is vital to ensure their involvement.

In the UK, the Special Needs Code of Practice, 2001 stated:

"Positive attitudes to parents, user-friendly information and procedures and awareness of support needs are important. There should be no presumption about what parents can or cannot do to support their children's learning. Stereotypic views of parents are unhelpful and should be challenged. All staff should bear in mind the pressures a parent may be under because of the child's needs."

As well as:

"To make communications effective professionals should: acknowledge and draw on parental knowledge and expertise in relation to their child focus on the children's strengths as well as areas of additional need recognize the personal and emotional investment of parents and be aware of their feelings ensure that parents understand procedures, are aware of how to access support in preparing their contributions, and are given documents to be discussed well before meetings respect the validity of differing perspectives and seek constructive ways of reconciling different viewpoints respect the differing needs parents themselves may have, such as a disability, or communication and linguistic barriers recognize the need for flexibility in the timing and structure of meetings."

In the UK, Frank Barnes Primary School does much work with the local hospitals, neonatal services and social workers to ensure that the 'Deaf perspective' is taken into account, viewing the child as a member of the Deaf Community, rather than just a 'disabled child who needs to be cured.'

Working with professionals, paraprofessionals and families, a measured and sensitive view is built that respects the choices that the child might want to make, or renege on, in the future. The school works hard to teach the families of pre-school children sign language, to provide language and cognitive development opportunities before they even enter the school system.

Each child with a Statement of Special Needs will have an IEP that identifies needs and proposes support avenues. Meetings will be held regularly and an annual review of the IEP will take place. In this review, not only are the related educators and professionals present, but the family is expected to be involved, as well as the young person if appropriate. This ensures that a holistic approach is taken, the family are fully informed as to progress and concerns and the professionals remember the 'human element' when making decisions.

Access to an Empowered Deaf Community & Role Models

In the United States, a strong sense of Community is present, where alumni from Deaf schools are showcased and celebrated. Members of the Deaf Community volunteer at the schools to give lectures, to work alongside the pupils and share their experiences. At the Rochester School for the Deaf, an 'in residence' program is in place, where Deaf professionals and artists come to work at the school for a month as an artist-in-residence, for example. A project would be created by the whole school and it would be contributed to by all the key stages.

The Deaf adult is seen as a role model to inspire the children to reach out for their goals and to witness a real-life example of someone who has gone on to succeed in the wider community. This is an excellent program that requires much commitment from the Deaf Community, with ones having to give up a great deal of time and energy to work with the schools. It might also take financial commitment from the schools to remunerate the individual for their time and expertise. This is something that needs to be supported, however, due to the value and contribution that has been seen in different contexts.

Technology

Technology is not a panacea for deafness, but its ubiquity has radically changed Deaf people's lives. Communication technologies have done much to remove linguistic barriers between D/deaf and hearing parties. There are many opportunities to promote their use and adoption. In the West, D/deaf no longer have to struggle to type written messages to one another, but instead can send video notes in sign language through apps such as WhatsApp and Skype.

Calls can be placed to one another through Skype, FaceTime and other apps. If a Deaf sign language user wants to place a call to a hearing person, they can call up an on-line interpreter and sign what they want to say, and receive the responses from the interpreter in sign language. This has given D/deaf ones a new level of control and independence of communication that previously was not possible.

Within the classroom, technology needs to be embedded to enhance teaching, without overtaking the emphasis of teaching and learning. In the US, within the two leading institutions: Gallaudet University and the National Technical Institute for the Deaf (NTID), based at the Rochester Technical Institute.

At Gallaudet University, technology within the classroom was fully integrated within the teaching and learning. This allowed seamless and inclusive communication between the students and the teacher in sign language. Cameras were placed on the walls behind the teacher, on the wall opposite the teacher and one at each seating place for students. The cameras are controlled by buttons placed in front of each individual, so that whoever wants to speak can press the button whereby the camera moves and the person who is speaking is then displayed on a large screen at the front of the class for all to see. In addition, the whole class and all comments are recorded and uploaded at the end of the class to allow students to review content and for those that missed the class.

Outside of the classroom, the use of a 'blackboard' - an online meeting space that can be used for teaching, discussion and submission of assignments - was fully utilized. Students were able to film themselves signing an assignment and submit it electronically through the blackboard. This would then be reviewed, marked and fed back on: all digitally. It was amazing to see such deployment of ICT in the classroom and learning environment.

NTID is markedly different in their classroom environment. It is very much a traditional room, with no real ICT being used. The teacher teaches in sign language, but the students take physical notes and submit written assignments. Regardless, it is easy to see the potential for utilizing technology in the classroom. Across the globe, education authorities are investing in iPads and tablets for each pupil, allowing them to record lessons and access the internet in class as a resource. At Frank Barnes, there is a scheme that allows students to take iPads home with recorded homework assignments and reinforcement exercises to compensate for the lack of communication and support at home.

It is easy to see that there is no real ceiling to the use of technology that supports and enhances teaching and learning.

Availability of Educational Resources in Sign Language

Whilst there are a great many resources available for teachers, parents and students, very little information is available in sign language for a Deaf student, or a Deaf teacher, to access directly. In many classrooms around the world, Deaf students must still carry a textbook, write notes in English and rely on interpretation from support staff to access resources. Along the bilingual approach to pedagogy, a Deaf student should be able to read English (or another written language) when they are being taught English.

When being taught another element of the curriculum, however, they should not have to overcome a linguistic barrier to accomplish a learning task.

Recently in the UK, a media company, ITV, have begun translating children's books into British Sign Language (and more recently, American Sign Language), exposing Deaf children to contemporary, age-appropriate literacy resources in their signed language. This is something that is being echoed in the USA, with the Texas School for the Deaf working with a Deaf production company to produce educational resources for Deaf students in ASL.

This is something that is severely lacking across the world: sign language resources for Deaf students to access directly. Many sign language dictionaries have been created for specialized subjects like photography or science, but all this is designed to access the written resources out there. Yet, at the fundamental stage, there is nothing for Deaf students to access independently, in a medium that they can understand at a native level.

Specialist Teachers

Teachers of the deaf are an integral and necessary part of the support framework for successful and effective Deaf education.

Here is the value of Teachers of the Deaf (ToD):

"Teachers of the deaf can offer:

- applied specialist knowledge across a range of relevant disciplines, including language, communication and speech development, speech acoustics, audiology and deafness
- practical experience of promoting language, communication and speech in deaf children
- practical experience of using hearing aids and other amplification equipment in everyday settings
- information about the nature and impact of deafness and the range of communication and other options available to deaf children and their families, to help parents make informed choices
- practical experience of working with a wide range of deaf children (including children of pre-school age) in different settings
- an understanding of the outcomes that may reasonably be expected for deaf children when support is sustained and developed effectively over time
- up to date local knowledge of the range of education and other support options available to deaf children and their families
- help to families in recognizing positive achievements or development in their deaf child"

There are a number of professional organizations for ToDs that provide continued professional development and keep them informed in advances in understanding of pedagogy and cognition. In the UK, the main organization is the British Association of Teachers of the Deaf (BATOD - http://www.batod.org.uk). In the US, there are several bodies, such as the Council of the American Instructors of the Deaf (CAID - www. caid.org).

Understanding of Deaf peoples' learning, cognition and make-up of the brain

It is now understood that a Deaf person's brain is actually different to that of a hearing person, and the way that they access and use the brain is also different. This impacts, therefore, on the way that they think, learn, process, assimilate and express information and their learning. To effectively teach a Deaf person, there must be an understanding of the nature of the Deaf one, which is what makes research into this area vital. One of the international centers of excellence in this regard is the Deafness Cognition and Language Research Centre (DCAL) based in London, England. This center is regarded across the world as a fore-runner in research and works with many international institutions.

Sign Language Interpreters

Alongside specialist teaching staff, sign language interpreters form an important part of any educational environment. These professionals are highly trained in both the source and target languages and are able to bridge the gap in communication within a mainstream classroom environment, as well as between the D/deaf child and his peers, his family and his teachers. Sign language interpreters are professional individuals who should not only be highly trained but also working to a Code of Practice and Ethics.

Application of International Best Practices in Qatar

The following list discusses the aforementioned best practices within a Qatari context, hereby presenting a set of recommendations.

Educational Environment

A Least Restrictive Environment, one which is language-rich, would be an appropriate aim for the institutions in Qatar. Promoting the use of sign language at all times, even when a D/deaf person is not present, encourages sign language to be perceived as a rich and living language. Seeing adults using sign language would build in the child a feeling of acceptance, belonging and pride.

The Complex could consider the introduction of videophones for internal communications, to allow children to see incidental interactions and learn social conventions.

Information boards could be replaced with flat-screen televisions mounted to the walls. These could be used to show information notices, announcements, the news when available in sign language and other media. IT classes could be used to create media internally and showcased through these 'information screens'.

The introduction of a sign language curriculum that goes beyond just teaching the language - an 'ASLology equivalent' is needed. Appreciation for the need to build a sense of identify and global-belonging within the wider Deaf Community is essential, especially as many of the students will eventually travel abroad to further their studies, according to current trends.

Partnerships with other schools in the Arab region, or further afield, could be sought to promote this sense of community within the Arab states and globally. Sharing and cultural exchange is a valuable part of a child's development.

Approach to Pedagogy

The Ministry of Education and Higher Education would do well to discuss with international experts regarding the effect of using UARSL as opposed to a natural, native sign language. A decision should be made, through consultation with the Qatari-Deaf Community as to which language should be used and cultivated domestically. A unified approach can then be reflected through policy and practice.

Bilingualism as an approach to teaching and learning should be considered. Promoting sign language alongside Arabic would do much to allow the student to access and thrive the wider community in Qatar, along with a greater access to their religion and history. A review of the curriculum and the use of sign/spoken modality within the classroom should be conducted and advice sought from centers of excellence.

Educational resources should be made available in sign language for use in class. In the same way that ITV in the UK is producing literacy resources in ASL and BSL, Al-Jazeera could possibly sponsor the creation of Qatari sign language or UARSL resources for use by families and schools.

If not currently in place, IEPs should be created and used effectively for each student currently in education. These should not only focus on educational achievement but also on personal and social development. This information should be reviewed by a team of professionals and paraprofessionals, along with the family, so that all are involved and informed as to progress and support needs.

Transition

There is obviously an issue with students who use sign language transitioning to Qatari universities. There is no data to show whether upon graduating the Audio Complex students return home, furthering their studies in the home countries or whether they go abroad. Research should be conducted into this area.

For those choosing to further their studies within Qatar, transition support needs to put in place. Support whilst studying should also be reviewed and implemented as soon as possible. Whilst there are currently no sign language users at universities in Qatar, the students who lip-read and utilize speech could be supported through various technologies. Mada would be best placed to review and suggest improvements in this context. For future consideration for sign language users, Deaf Unity has provided consultation for many universities in the UK and would be happy to provide advice.

Certainly, children need to be inspired at an early age to reach out for further studies and for career choices. This should be something that the Complex looks at and includes in their IEPs for discussion and review. Attainment and goals would then fit into an actual context with a goal and focus.

Universities should also have opportunity to raise awareness on access and support needs for Deaf students and those with other disabilities. The Audio Complex could work with the universities to visit the campus, be exposed to higher education environments and dispel the concerns and reticence that students may have. This would also serve to allow institutions to better understand the abilities and needs of Deaf students.

Supporting Infrastructure

Early detection and intervention

This is something that the ministries responsible for health and education could consider and review. A unified and practical approach should be decided upon that identifies childhood/infant deafness and immediately acts to support the child and the families. Emotional support should be given to the families to help them overcome any social anxiety they have to understand that prejudice is not Quranically-based and no shame should be felt.

Health-care professionals should be trained and aware of the causes and incidences of deafness and of the organizations and government entities that should be involved. Information should be made available to the families of a Deaf child as to the various options available to them, without pressure or coercion. Organizations in Qatar could be engaged to produce packages with available linguistic, social and technological options for consideration.

Family involvement and support

This is important to ensure that people don't misunderstand the nature of and reasons for deafness. Families need to be shown respect so that they, in turn, show love and respect to the child. Emotional support should be provided and any stereotypes challenged by the time the child is ready for language and formal education, so that they do adopt negative views held by their families.

The QCSCD and the Audio Complex, along with other institutions, should begin engaging with families at the point of identification through a unified and practical framework. Depending on the child and if there are any associated disabilities, the best center of provision can take up care and monitoring at the earliest stage.

Families should be encouraged to learn sign language, whether the child will eventually use this as his chosen mode of communication or not, as obviously a language takes time to learn. Rather than staff of the school being the sole learner, parents and siblings should also be encouraged. Involvement in the child's language and educational decisions is paramount, so attendance in reviews of IEPs with the school is needed.

With the support of the creation of sign language literacy resources by the Ministry of Education and Higher Education, families should seek to support and reinforce learning before the child enters formal schooling and throughout.

Access to an empowered Deaf Community and role models

The QCSCD should begin actively engaging with the Deaf youth of the country and projects and programs should be created, if not already in place. Funding should be made available for this so that young ones have access to a wider community beyond their family and school. These activities should not only be religiously-centered, but also focus on emotional and social development through heritage visits, sports activities and other such means.

The wider Arab Deaf Community should be engaged with to identify role models and peer counsellors from other countries. This pool of Deaf adults could be encouraged to visit the school, or through the internet, to engage and inspire the students. This will give them more motivation to further their studies and develop scholastically.

Technology

The Mada Assistive Technology Center could be engaged to conduct an audit and recommendations for further embedding and implementation within classroom environments. The Audio Complex has a well-equipped computer suite and a very skilled and driven teacher, so there is already a good foundation for enhancing the curriculum already in place. ICT lessons could serve to compliment an 'ASLology'-equivalent program to expose and up-skill students in their use of technology and sign language.

Assistive technologies should also be looked at, in terms of palantypist services and other devices that could support learning.

Specialist Teachers

It is unclear the level of expertise and qualification in the teaching staff already in place in the Complex. Regardless, membership of a professional body of Teachers of the Deaf would be of great benefit in ensuring up-to-date approaches to teaching and learning. If not already in place in Qatar or the Arab region, a professional body should be formed and support should be sought from the various universities that support sign language programs. This body could then partner with an international organization to follow an already proven model of professional development.

These teachers can then be deployed within schools, advise on strategy, work with neonatal provisions, support families, and work with universities in ensuring effective transition.

Sign Language Interpreters

The current situation with unqualified interpreters should be addressed, alongside the question of which language should be used. Work needs to be done to develop a sign language curriculum for learning, teachers identified and accredited, and a framework of progression created. These ones can then be trained as interpreters which will move the role into a professional status. The World Association of Sign Language Interpreters could be engaged with to request assistance and guidance.

Qatar could then create a professional body for interpreters and formulate a Code of Ethics and Practice for all to adhere to, protecting the rights of the consumers (Deaf and Hearing) and the interpreters themselves. These interpreters could then be deployed within schools and universities to ensure the best support.

Access and Engagement

The government could consider creating a national Access and Engagement department to provide guidance and advice to educational institutions as well as public buildings relating to access and engagement. This department could not only advise on physical access, but also work to address many of the elements identified for the Deaf thus far.

Summary of Recommendations

These recommendations should be read alongside those discussed above. Some of the comments above relate to a cultural or attitudinal shift, which will obviously take some time through efforts from various entities.

In the more immediate term, the Ministry of Education and Higher Education may possibly consider the following:

- Review of current teaching qualifications, curriculum and pedagogical ideology in place at the Audio Complex.
- Review of the current provision for neonatal and infant screening for deafness. Upon identification, an audit is to be conducted of what is the supporting infrastructure.
- Review of the current drive for the unification and creation of UARSL and its impact on educational and social services.
- Engagement of Mada Assistive Technology Center to review technological implementation in the classroom, along with potential technologies for the wider community, such as videophones and assistive devices that would support D/deaf people outside of the classroom, at home, at university and other contexts.
- 5. Engagement of Deaf organizations from abroad who are sensitive to the Qatari-context, that can begin to work with the schools and universities to raise awareness, audit accessibility, provide guidance and support to effect change. Current projects in their portfolio could be adapted for application to Qatar, such as 'ASLology', Deaf Learners, Deaf Role Models and Deaf Graduates. More information can be made available on request.
- Begin assessing the validity of creating educational materials and resources in sign language, for use both within the classroom and by families.
- 7. Review the current sign language interpreter provision and engage international bodies such as WASLI.
- 8. Engage a research center to: identify the profile of the Deaf community in Qatar; track numbers and provisions; identify attainment and where graduating students choose to further their studies; along with other necessary data so that decisions can be made by governmental institutions in an informed manner. One major barrier in compiling this report was the lack of concrete data to work from.

- 9. Engage international centers of excellence, such as Gallaudet, MSSD, Frank Barnes and the NTID to benefit from their best practice.
- 10. Work could be done with the QCSCD to being changing perceptions and prejudices towards deafness both those who are Deaf and their families.

Conclusion

This report has served to give an insight into the current Deaf education provision in Qatar and identify areas of possible improvement. This should be seen as a positive step in celebrating what already exists and benefitting from learning and best practice from international sources.