Practical steps towards developing successful inclusive education supports in the Middle
East
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#### Abstract

Inclusive education is a learning system where learners with various disabilities learn in an environment with equitable educational opportunities alongside non-disabled peers. The theoretical framework forming the foundation of this paper is disability studies which include the social model of disability, which pushes back against the medical model of disability. Inclusive education is important because it promotes friendship among learners, develops individual strengths, and promotes equity in access to educational opportunities. The need for equity in Middle Eastern schools began in the late 1950s. Several laws have been enacted to increase the access of children with disabilities to education. Inclusive education practices are hampered by teachers' attitudes, shortage of resources, and social stigma. For any development in promoting inclusive education, individuals, families, community groups, businesses, and non-governmental organizations (NGOs) must create a supportive environment. Inclusive education paves the way for equity in access to education. Lastly, the practical strategies towards developing successful inclusive education supports in the Middle East include incorporating universal design for learning, redesigning teacher education programs, implementing IEPs, and using assistive technology.

*Keywords:* Inclusive education, disability studies perspective, students with disabilities, effective classroom practices.

#### Introduction

Inclusive education is a system that accommodates all learners regardless of their disabilities (Baglieri et al., 2011). It allows them to participate and contribute to all aspects of activities in the school (Burstein et al., 2004: Todorova & Djafche, 2019). It is anchored in the idea that to access quality education, learners' needs must be addressed. Inclusion of learners with disabilities in a learning environment with non-disabled students helps them attain better educational outcomes. One way to accomplish this is by introducing inclusive education where learners are placed in a common learning environment, to eradicate issues that may lead to learners being excluded from an education program (Baglieri et al., 2011). The segregation of learners makes some students feel inferior, which affects their growth and development. To address this issue, the learning environment should comprise classrooms, playgrounds, libraries, and other recreational avenues that can accommodate all learners irrespective of whether they have disabilities (Boyle, Anderson & Allen, 2020). Inclusive education is identifiable by specific characteristics which are: (a) accepting all learners, (b) evaluating the learners in terms of their ability, (c) developing a curriculum that favors all children (King-Sears, 2020), (d) engaging expertise in instilling education to learners who are rich in knowledge on the strategies of handling different types of learners, (e) supporting the needs of all learners, (f) and developing classrooms for all learners (Broderick, Mehta-Parekh & Reid, 2005).

In the Middle East, Arab countries have joined the rest of the world in supporting inclusive education, although their approaches depend on the kind of disability a particular student has (Akkari, 2004). For instance, students with certain disabilities, such as learning disabilities, may be included in classrooms, while those with physical disabilities, autism and cerebral palsy are typically excluded (Diana, 2016). This is unlike in the United States, where all learners are

regarded to have equal rights in access to education (Evans & Hornberger, 2005). This could be attributed to the progressive development of policy frameworks in the United States' education over the years. For example, "the landmark Supreme Court case Brown v. Board of Education and the government's role in education ushered in an era of 'inclusion' in the United States' education system" (Daren, 2018, p.1). Therefore, many countries around the world have used the strong US-based disability rights legislation (e.g., ADA, IDEA) as a basis for including students, including countries in the Middle East.

#### Importance of inclusive education to students with disabilities

As it has been realized, inclusive education is essential as learners with disabilities can enjoy the following benefits from inclusive education. Firstly, inclusive education develops friendships with a wide variety of other children, promoting role models and opportunities for growth (Al-Jadir, 2020). Secondly, inclusion provides students with and without disabilities opportunities to learn about and accept individual differences (Eidelman, 2011). Thirdly, inclusive education helps students with disabilities develop individual strengths. Fourthly, it helps teachers individualize goals and participation in the classroom for learners with disabilities (Hornby, 2015). Fifthly, parents in the Middle East, who at times tend to hide their children with disabilities, get an opportunity to take them to school, because inclusive education fosters a school culture of respect and belonging, urging students to appreciate diversity and inclusion (Al-Hilawani et al., 2008). The inclusion also leads to improved educational outcomes in that the students become reliable and effective people in society. This is because the students will have gained confidence in interacting with their peers while handling diverse challenges at the community level. The students will become useful citizens as they will have acquired useful skills that can be utilized in different fields, such as improving adult outcomes in post-secondary

education, employment, and independence (Jorgensen, 2018). Lastly, learners with varying abilities are better motivated when they learn in an inclusive classroom (López-Azuaga & Suárez Riveiro, 2018).

## History and legislation of inclusive education in the Middle East

In the Middle East, inclusive education was poor because of the negative attitudes toward disabled people that existed before the 1950s (Todorova et al., 2019). There were no policy frameworks on the education or protection of children with disabilities' rights during this time. However, with the onset of the 20th century, efforts to make education a right for every child have been evident in the Middle East (Aldabas, 2015). For example, one of the key education reforms in Iraq has been training more special education teachers (Alborz, Slee & Miles, 2012). In the United Arab Emirates, it was projected that all private education would be fully inclusive by 2020 under the Dubai Inclusive Education Policy System, where all learners would enroll in any private school or university without the option of rejection (Clara, 2020). Following such developments, countries such as Oman, Qatar, and Saudi Arabia have shown remarkable progress for the need for laws to back inclusion education to help protect the rights of every individual (Al-Harthy & Al-Adawi, 2002). However, some countries have not yet shown significant progress toward increasing the number of students in inclusive education classrooms, such as Jordan. According to Disability-Inclusive Education in Jordan Factsheet (2021), Jordan's Ministry of Education and Ministry of Social Development indicated that only 1.9% (27, 694) of the 1.4 million children enrolled in primary education are children with disabilities. Additionally, Jordan's Department of Statistics (2019) indicated that 79% of students with disabilities of school age are excluded from general education. That means the number of students with disabilities in Jordan's public schools is still considered very low. There is a need for a

significant movement and effort toward improving the lives of individuals with disabilities and providing access to quality learning opportunities for all children, including children with disabilities.

#### Cultural and social attitude toward inclusion

Hadidi & Al Khateeb (2015) illustrated that although Arab countries have taken significant measures to improve the living of individuals with disabilities since the 1980s, making meaningful progress in this field remains a struggle due to political, economic, social, educational, and cultural restrictions and limits. For instance, in Arab societies, societal stigma and degrading beliefs still exist, with these people seen as a huge burden on families, caretakers, and society. Arab countries have the early stages of the "integration" model, popular in Western countries before the 1970s. In Arab countries, special education, services, and programs are still largely institutionalized. Large class sizes, inaccessibility of most school buildings, and negative attitudes from teachers, students, and parents are among the many arguments for the nonimplementation of the inclusion practices. As a result, obstacles to the design and execution of inclusion initiatives must be identified and appropriately addressed (Hadidi & Al Khateeb, 2015). From the cultural and religious perspective, Middle east countries believe that the disabled are associated with God's will. According to Mohamed Madi et al. (2019), parents of children with disabilities believe that God predetermines both the disease and the cure, which prayers may mediate. Prayer was constantly invoked as core support for parents throughout, regardless of their children's disability severity.

Furthermore, the negative perceptions from the family level due to the lack of knowledge and awareness made the family members treat the children as weaklings. The negative perceptions from the larger society where the members feel frustrated if they have a disabled

child made the family members and the disabled children in Middle East countries consider the children as being unfit for any activity within the community (Mohammed et al., 2019). Further, the community members feel shame as they do not want to be associated with these children. Families with disabled children were also stigmatized in that the other community members would pity and sympathize with them although they had children like them, only that their children have disabilities (Duran & Ergun, 2018).

The stigmatization where the children were considered less able led to the erosion of the students with disabilities' self-esteem as they felt they were being considered weaklings in society. The community members' negative perception made them feel powerless, lacking control as they are considered powerless and people who could not make major decisions independently.

Researchers have also identified that students with disabilities have medical issues in Middle East countries, and this has made children with disabilities socially isolate themselves and avoid negative feedback from their community members. The Middle East countries' culture also limits the people with disabilities from having their own independence as people will not expect them to walk freely and perform any roles on their own. This leads to the provision of unnecessary assistance that limits their ability to make crucial decisions on their own (Philohuman, 2013).

This makes them feel as if they are weaklings since society believes that they have no personal power to perform many roles on their own.

In addition, the able-bodied people within the community have also participated in stigmatization and intolerance in that they consider children with disabilities as not mature ones. They believe these children lack crucial elements, thus labeling them as people with disabilities openly during their communication (Eissa Saad & Borrowska-Beszta, 2019). This habit has made children with disabilities feel misplaced as they have been labeled with names meant to

discourage them from participating in any meaningful conversations. The constant shaming has contributed to the reduction in the morale and ambitions of the learners to actively participate in mainstream academic classrooms as they believe that they are incapable and disabled. This has created a barrier between the abled and the disabled individuals in this region as the abled believe that people with disabilities require more specialized teaching and care (Alshaigi et al., 2020). The families of children with disabilities who are isolated due to their disabilities believe that community members need to improve their awareness about social construction and the effect of stigmatization and disability. Also, Middle East countries must make a more significant effort to raise public understanding of the capabilities and rights of people with disabilities, dispel misconceptions and nonscientific explanations of disability, challenge cultural portrayals of disability, and encourage realistic attitudes (Hadidi & Al Khateeb, 2015). The following section will discuss Saudi Arabia's efforts toward inclusive education in one of the Middle East countries.

#### **Inclusive education in Saudi Arabia**

Globally, in the late 1900s, inclusive education became widely recognized as a proper philosophy and a vital structure for reforming the education sector. More recently, Saudi Arabia has come to this position (Aldabas, 2015). While various countries have adopted inclusive education, the Kingdom of Saudi Arabia is just starting these conversations (Alharbi & Madhesh, 2018). The Kingdom of Saudi Arabia initiated the Regulations of Special Education Programs and Institutes (RSEPI) in 2001 after reviewing the Individuals with Disability Education Act (IDEA) in the United States (Alquraini, 2011). The purpose of (RSEPI) is to provide free and appropriate education for students with disabilities, requires special education service to include individual education programs (IEP), related services, transition services, and early intervention

programs, defines vital procedures for multidisciplinary teams to consider in determining special education service eligibility, provides general background defining key terms to be used in the law, and requires schools to place students with disabilities in the least restrictive environment (LRE) (Alquraini, 2013). Additionally, according to Saudi Arabia's Ministry of Education (2020), RSEPI focuses on providing guidelines on the concept of disability in restrictive environments and identifying the multidisciplinary teams required to provide inclusive education to individuals with disabilities.

Furthermore, the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) is the first legally binding international treaty to specifically address the rights of individuals with disabilities worldwide (UNCRPD, 2006). This convention aims to promote, defend, and ensure that people with disabilities have full and equal access to all human rights and fundamental freedoms and promote their inherent dignity (UNCRPD, 2006). The two primary documents utilized as a baseline for this convention comprise the convention on the rights of persons with disabilities that contains the human rights provisions and the optional protocol to the convention that indicates the rights of persons with disabilities. Saudi Arabia was among the countries that ratified the UN convention on the rights of persons with disabilities in 2008 to shift away from the deficit-based model. It specifically calls for "prompt national-level action, and advance the social integration of persons with disabilities in society through its inclusive development mandate." (Stein & Lord, 2009, p. 39).

In addition, Saudi Arabia established the National Institute for Professional Education

Development (NIPED) in 2016 to expand and enhance teacher professional development.

NIPED established many training programs on its own, and it has developed an online training site for teachers to facilitate distance learning and encourage skills-based learning. It also

provides scholarships for teachers to have the opportunity to travel to advanced countries such as the United States, UK, and others to have the opportunities to extend their knowledge and enable them to have high-quality training on teaching students in classrooms (OECD, 2020). These efforts were established to create an effective inclusive education implementation for students with autism across public schools in Saudi Arabia's cities.

Additionally, according to Saudi Arabia's Ministry of Education (2019) report, 74362 students with disabilities were educated in general education classrooms across all Saudi Arabia's public schools. According to Saudi Arabia's 2030 vision goals, the Ministry of Education will aim to expand the number of school-age students with disabilities in general education classrooms across all public schools to enhance equity and inclusion for students with disabilities (Ministry of Education, 2020). According to the current state, Saudi Arabia made an effort to improve the quality of education for students with disabilities; however, more effort is needed to be in place to implement successful inclusive education practices fully. To achieve that, with Vision 2030, Saudi Arabia has committed to increase the numbers of students with disabilities in inclusive classes, increase teachers' professional development to prepare them to work effectively with students with disabilities fully, and expand society's participation in protecting the rights of children with disabilities (OECD, 2020; Gaad, 2010).

## **Disability Studies Theoretical Perspective**

The conceptualization that disability is a social construction or created is at the core of DS, and it is contrary to clinical, medical, or therapeutic points of view of disability. Disability studies emphasize how disability is defined and represented in society (Oliver & Barnes, 2010). Therefore, disability is a construct that derives its meaning in social and cultural conditions rather than a visible feature in the disabled individual (Taylor, 2006). Disability studies scholars

examine the concept of disability by troubling the meaning, nature, and definition of disability (Taylor, 2006). The Disability Studies (DS) framework challenges normalcy by valuing disability, which provides a chance for society to be keen on how it translates and values human diversity, hence contemplating disability in a more nuanced manner (Connor, 2013). Disability studies acknowledge that disability is an important aspect of human life and that it has crucial economic, social, and political implications in society that affect both people with and without disabilities (Ferguson & Nusbaum, 2012).

Shakespeare (2006) defined the social model of disability as "the problems disabled people face are the result of social oppression and exclusion, not their deficit." (p. 217). The social model of disability emphasizes that people are not disabled by the functional limitations of their disabilities but rather by the external barriers that prevent them from fully participating in the society in which they live (Oliver & Barnes, 2010). Therefore, DS postulates that disability is a social construct as articulated in the social model of disability, which utterly opposes the medical model of disability through re-expressing disability as naturally usefulness laden and culturally and historically placed – hence disability is not a condition or thing that individuals have but a social negation instead (Oliver, 1990; Shakespeare 2006).

Additionally, the social model of disability emphasizes that individuals are limited predominantly by attitudes, policies, and environments that are not accommodative and include the wide range of human diversity and therefore, minds and bodies of people with disabilities should not be marked as deviant but should be acknowledged as diverse and hence the need to alter, acclimatize, and influence the classroom setting, syllabus, and instruction to accommodate this diversity (Barnes, 2007). The medical model of disability expounds disability as a personal affliction, problem, or disease requiring mitigation or cure (Shakespeare, 2006).

Disability has historically been constructed and regarded as a mental or physical impairment. Disability studies operate within the social model of disability, which situates disablement as a process that occurs within interactions between individuals and their social, political, historical, and environmental contexts. For example, according to the social model, barriers in the school environment yield disparities that students with disabilities face (Gabel, 2010). The social paradigm perceives disability as a socially constructed phenomenon in which people with disabilities' rights are contingent on the attitudes of other members of society toward them and systemic barriers to accessing (Gabel, 2010). Disability studies oppose the medical model of disability while advocating adopting the social model of disability to recognize that injustices experienced by students with disabilities are rooted in systemic problems (Baglieri, 2017).

Central to the social model is the idea that disability is socially constructed. Rather than relying on positivist science and its emphasis on constancy across time and setting, social constructionists contend that meaning is created through interaction and discourse (Gallagher, 2004; Magasi, 2008). Taken further, disability in school emerges through the student's interaction with the classroom opportunities, teacher perspectives, and practices (Ashby, 2012). Furthermore, as Ashby (2012) notes

One of the benefits of a disability studies approach to education is that it is much more emancipatory than traditional models of special education. When disability is viewed through a lens of social construction, teachers have clearer ways to intercede when the context is considered. If context and environment matter, teachers are empowered to alter them. (p. 96)

Through the lens of disability studies perspective, educators should value the possibilities of students with autism instead of understanding autism or differences as problems to be fixed in the classroom. As stated by Ashby (2012):

When disability is viewed through a lens of social construction, when the context is considered, teachers have clearer ways to intercede. If context and environment matter, teachers are empowered to alter them. (p. 96)

Through reflection on social justice issues and the stigma and oppression that students with autism go through in the education system, DS advocates removing the school and classroom barriers to provide an accessible and equitable inclusive education environment.

In the Middle East, people with disabilities are seen as being sick. As a result, families in the Middle East still look at disability as a condition that can be fixed using a medical procedure (Rugh, 2002). Consequently, they travel to hospitals in different countries to fix their children's disabilities. Based on this approach, the majority of people with disabilities in the Middle East are denied access to educational facilities and do not have the same opportunities as non-disabled people. Similar to elderly citizens, people with disabilities were seen as people who cannot love, hold employment in good jobs, or even live independently among others (Alquraini & Rao, 2020). Others discriminate against them by viewing non-disabled people as better or superior to disabled people such that society ends up describing people with disabilities as failures and embarrassment to society.

Practitioners and scholars who subscribe to the social model perceive disability as a socially constructed phenomenon, which means it pushes back against the medical model. They consider people with disabilities as people who need support (Levitt, 2017). For example, having public buildings that are not accessible for entry by people with mobility disabilities or public buildings

that lack toilet facilities for people with disabilities is a socially constructed obstacle to people with mobility disabilities (Rees, 2017: Woods, 2017). There is a need to educate society in the Middle East countries on the importance of providing an accessible and equitable environment and communities for individuals with disabilities.

# Challenges facing inclusive education in the Middle East

The value of inclusive education in most Middle East countries has taken decades to become realized (Amr, 2011). Often, those with disabilities were perceived as lesser members of society, and little attention to their education was taken. The onset of the 21st century has shown significant improvements in how children with disabilities are treated, but challenges still exist (Kamel, 2014). Firstly, many countries in the Middle East do not have sufficient resources and teachers to support both regular and Islamic education to students, which results in overworking and under-skilled teachers (Gabel, 2010). Secondly, general education teachers and other educational stakeholders in schools hold negative attitudes and misconceptions of students with disabilities (Olkin, 2002). Thirdly, in areas such as Oman in the Middle East, there is a lack of systematic differential identification of people with disabilities. These delays of support for students with disabilities create further barriers to inclusive education (Ferguson & Nusbaum, 2012).

Another challenge is the general belief that children with disabilities do not have unique needs, and mainstream practices would be sufficient for them to improve (Al-Jadir, 2020). In addition, there is strong resistance from parents among Arab and Muslim communities to having their children labeled as having disabilities, which is rooted in historical cultural attitudes and related stigma; this hinders the realization of support for disabled children (Boyle et al., 2020). Lastly, poor implementation of inclusive education policy is significant, as some teachers are not

yet able to recognize and understand strategies and techniques to use in inclusive classrooms (Blamires, 2003). There is no adequate support for inclusive education from concerned stakeholders. This is attributed to poor policy implementation. Many governments in the Middle East countries have not effectively implemented an inclusive education policy framework (Diana, 2016).

# **Building schools for change**

For any development or positive change in education, individuals, families, community groups, businesses, NGOs, and schools need to come together to support learning, and support students in achieving and learning more in school, staying longer, and gaining more experience. In this regard, there is a need to expand the school's visions to include the local communities (Messiou, 2011). The community should develop an interest in inclusive education to promote education for children with disabilities. There is also a need to reach out to all stakeholders. The parents, teachers, IEP teams, community, and NGOs should collaborate with students and let students express their wishes for their schools, their educational interests, and their level of mentoring and support (Akkari, 2004). Communities should also create local resource groups that identify the available resources and materials that other stakeholders can supply at little cost or for free. The community can also come up with networks that can be utilized to raise awareness of local children's and family's needs. This changes the way students participate in decision-making (Cook, Tankersley & Landrum, 2009). It is unfortunate that while the Middle East is made of wealthy countries, they spend their resources to promote institutions for just students with disabilities, rather than spending their resources to promote inclusive practices and fight for disability rights. Therefore, it would be good for Middle East countries to find a way of addressing the needs of individuals with disabilities by promoting inclusive education.

## **Implications for effective inclusive practices**

If the Middle East countries were to fully realize the importance of inclusive education, every child would have an opportunity to access quality education. As a matter of fact, when all children, regardless of their differences, access education together, everyone benefits. For example, inclusive education brings a unique contribution to a classroom fostering social relationships and respect as students' study together (Broderick et al., 2005). This enables the learners to understand that difference in abilities is just a normal part of life, and not a punishment, sickness, or something to discriminate against in a classroom (Ashby, 2012; Eidelman, 2011). To teachers, inclusive education ensures educators have quality training, flexibility, and resources to teach diversified students for effective transformation to inclusive education. As a result, the teacher's attitude and skills need to be improved to better serve the student and society as a whole (Boyle et al., 2020). Lastly, inclusive practice calls for parental involvement in learning. Parental involvement is critical in promoting diversity in a school system. This would involve educating parents on the importance of inclusive education for children with disabilities, as most Muslim communities in Oman and some other Middle East communities fear their children may be mistreated in schools (López-Azuaga & Suárez Riveiro, 2020: Binmahfooz, 2018). This would help parents appreciate the need to take them to school.

#### Practical strategies to move towards inclusive education

Inclusive education should be embraced worldwide because it provides all children with opportunities to develop friendships with one another. Likewise, it builds a strong foundation for children with disabilities to obtain the best careers, like any other child (Almedlij & Rubinstein-Ávila, 2018). To attain the aforementioned goals and others, evidence-based practices must be employed to promote inclusive education for children with disabilities. In this regard, the

curriculum designed to discriminate against people with disabilities needs to be restructured by removing all obstacles that diminish the interests and rights of learners with disabilities (Rugh, 2002). Several practical strategies towards inclusive education that must be put in place are described below.

## **Step One:** Incorporate Universal Design Learning (UDL)

Universal Design Learning is a teaching and learning methodology that helps create equitable opportunities for all students to excel (King-Sears, 2020). Based on this definition, curriculum designers should use UDL principles comprising options for representation, action and expression, and engagement to build accessible inclusive classrooms (CAST, 2020). Representation includes providing more than one format of information (i.e., text, audio, video, and hands-on learning). Action and speech mean allowing children more than one way to engage with the content and to explain what they have learned. Engagement includes the use of different ways of inspiring learners (CAST, 2020). Application of the aforementioned principles ensures every learner's interests and abilities are catered based on brain networks, strategic networks, and recognition networks (CAST, 2020). This framework establishes how learning should take place in an inclusive classroom, who should be included in the learning system, and why there should be inclusive education. If UDL was effectively implemented in Saudi Arabia, most children would enjoy learning because those with disabilities would not be discriminated against. In this regard, teachers would provide learning opportunities such as supplementary teaching or assistive technology among learners with disabilities to ensure equitable learning outcomes to guarantee that all learners enjoy learning. Likewise, other learners would learn to accommodate their peers with disabilities and appreciate their contributions to learning. The following are examples of how UDL might look in the context of Saudi Arabia. First, there should be a flexible workspace in the learning environment such that students would be given an opportunity to create a podcast, videos, or draw comic strips to illustrate what they know while completing assignments. Secondly, with UDL, students might get feedback on their academic progress every day. As a result, students are encouraged by teachers to focus on their strengths rather than weaknesses. By focusing on the feedback of one's strengths, it's easier to overcome the weaknesses and improve learning outcomes. Thirdly, with UDL, materials could be available in different formats. There may be many reading resources available to students, including print, digital, text-to-speech, and audiobooks (Alzahrani, 2018). In a UDL-informed classroom, there may be options for text enlargement for digital text, along with choices for screen color and contrast. The videos would have captions and audio transcripts would be available. The differences in the formats may improve the learner outcomes. All the three principles of UDL are structured through 9 guidelines and 31 checkpoints (CAST, 2018). These guidelines and checkpoints are designed to support students and enable them to access the learning process and develop their academic skills to students who are "purposeful & motivated, resourceful & knowledgeable, and strategic & goal-directed." (CAST, 2018). These provide classroom teachers with specific pedagogical strategies to break down barriers to the learning process for all students. The principles, policies, and checkpoints are organized from the most general (Principle) to the most specific (Checkpoints). In combination, the principles, guidelines, and checkpoints can break down curriculum barriers for students with autism and diverse learning needs (Capp, 2020).

## **Step Two: Redesign Teacher Education Programs**

Teacher education programs should embrace Disability Studies in Education (DSE) and inclusive education. Disability Studies in Education is an emerging and interdisciplinary area of

research that offers an alternate way of thinking about student challenges, including disability and support related to disability (Collins & Ferri, 2016). Redesign of teacher education programs may involve two steps: (a) inclusion of DSE in pre-service education and (b) inclusion of DSE in in-service teacher training. During pre-service teacher training programs, there is a need to include courses on DSE and inclusive education to create awareness of learners' needs with disabilities among teacher trainees. Typically, these programs consist of a combination of theoretical teaching expertise and field-based experience in practice. Although DSE and inclusive education are important approaches to learning of students with disabilities, DSE is a different and stronger approach in comparison to inclusive education because it encourages research that is produced by and accountable to disabled people. Likewise, it recognizes the importance of interdisciplinary approaches inside and outside the field of education and facilitates engagement from a range of disciplinary perspectives between researchers, an aspect that requires it to be strengthened in inclusive education. DSE is based on creating an accessible and equitable environment by modifying the lesson use differentiation structure and tools that support learners in inclusive education classrooms. From a social justice point of view, this entails standing up against oppressive structures and collaborating with colleagues within and across disciplines to ensure the needs of the students with autism are met. These elements then fall back to how well the teachers are prepared to teach students with autism effectively and collaboratively with the team in inclusive education settings. Disability studies in education will help unpack what preparation is required for teachers to have the knowledge and skills about things they can influence in the classroom to enhance social justice for students with disabilities.

In addition to changes to pre-service teacher education, practicing teachers need to be given an opportunity to enhance their teaching experiences on inclusive practices through in-

service teacher preparation. This provides a sound definition of inclusive education and the need to follow inclusive values and practices that help all learners in general and make education a welcoming and positive experience for all. In-service teacher training programs also help us realize that inclusive education exists not only in isolation within the education sector but through the cooperation of all social stakeholders. The inclusion of DSE in teacher education programs will enable teachers to understand individual learners' needs in inclusive classrooms. Likewise. DSE provides a strong contrast to conventional special education views frequently taught in teacher preparation programs (Collins & Ferri, 2016). As stated by Cosier and Pearson (2016), "Specifically, DSE provides the 'why' to the 'how' of strategies such as Universal Design for Learning (UDL) and differentiated instruction that increases access to general education curriculum and contexts for students with disabilities" (p. 3). Based on this point of view, curriculum designers and teacher education programs should use various instructional formats, including the application of diversified methods of implementing the curriculum (i.e., using a variety of ways of teaching in an inclusive classroom to meet the individual needs of learners (Savior, Suny & Al-Zoubi, 2018). For instance, teacher educators should instill the necessary knowledge in teachers for them to be able to identify the best instructional methods to inclusively implement to all students in their classroom. Teacher awareness of group discussions, peer teaching, and individualized instruction should be encouraged. The practice should begin in teacher training colleges where all teachers receive certification to teach all students. Teacher trainees must be taken through a curriculum that ensures they acquire the skills necessary to cater to learners' different needs in inclusive classrooms (Schaefer, Cannella-Malone & Brock, 2018). For example, all teachers should be educated during training on the importance of sensitivity in giving examples to learners living with disabilities. Also, teacher trainees should be trained to

provide a favorable learning environment (Almedlij & Rubinstein-Ávila, 2018). The learning environment should be accommodative of the needs of all learners.

# **Step Three: Implement Individualized Educational Programs (IEPs)**

Teachers, parents, community, and stakeholders need to know every student's Individualized Educational Programs (IEPs) to enhance an equitable learning environment for everyone (Messiou, 2011). If a behavior plan is in place, the plan should be discussed with parents and students so that if those goals are not met, everyone is aware of the expectations and consequences (Al-Jadir, 2020). This calls for teacher-parent partnership in promoting the needs of learners. Parents should be invited to schools often for progress reports on their children in inclusive classrooms. These meetings will create an opportunity to identify some of the challenges students encounter and ways of dealing with them. Likewise, teachers should send frequent progress reports to parents and work in collaboration with school administrators to identify the needs of learners with disabilities and the resources ((Vanderbilt University, 2020)).

Local communities should provide resources to support inclusive education (Ashby, 2012). Collaboration between teachers, parents, school administrators, and the community should ensure all learners' needs are addressed appropriately. Individualized Educational Programs are not a widespread phenomenon in Saudi Arabia because 96% of students with multiple and significant disabilities have earned their education in separate institutes for special education (Alquraini, 2011). The following are examples of what implementing inclusive IEPs in Saudi Arabia might look like. First, introduce an IEP for one subject area only. The program would entail students with disabilities joining regular education classes for special subject areas such as science, social studies, art, music, library, gym, and health. Secondly, frequent teachers in the classroom will read the IEPs of students and be familiar with the services and monitoring

needed in the plan. Lastly, a resource or learning support classroom in the least restrictive environment could promote inclusive education. For small-group teaching, groups of students with similar needs are brought together in this setting.

## **Step Four: Use Assistive Technology**

Schools should embrace the use of assistive technology in inclusive classrooms to make the learning environment attractive and accessible for all learners. Whether students have physical impairments, dyslexia, or intellectual disability labels, assistive technology can help them access the academic curriculum. Likewise, assistive technology enables the teachers to effectively support students with disabilities in understanding the content (Messinger-Willman & Marino, 2010). Assistive technology could help students with disabilities attain academic success because it will help organize their learning experiences. Assistive technology in the context of inclusive education should include simple language for organizing daily activities, checklists, and tracking other items (Alkahtani, 2013). Assistive technology in inclusive education should contain visuals to attract the attention of students with disabilities (Zilz & Pang, 2019). For instance, to complete their assignments, students with learning difficulties including dyslexia can use electronic worksheets. These worksheets help students line up their assignments with terms, equations, and numbers (Alkahtani, 2013). The second example involves the use of software for phonetic spelling. Reading and writing can be a struggle for many students with learning disabilities, but phonetic spelling programs are programmed to translate the typing of the student into the word they were supposed to write automatically. Lastly, videotaped social skills can also be used to facilitate education for students with autism. Students with autism and other students with learning disabilities, for example, will struggle to figure out regular social interactions. The most popular way to learn about social experiences has been to practice them in the past.

Unfortunately, when they sought to figure out what constituted "normal" social interactions, many students unintentionally acted inappropriately. With videotaped social interactions, without inadvertently offending others, students may learn valuable life skills and social behavior. These videos will function for self-help, linguistic, academic, and emotional issues as well in addition to interpersonal skills. Therefore, the effective implementation of assistive technology in inclusive education could better all learners' learning outcomes.

#### **Conclusion**

In conclusion, the concept of inclusive education has found its way to the Middle East after the realization of the importance of including every child in schools to catch up with their quickly growing economy, especially in UAE and Saudi Arabia, where oil mining is the primary income source. After local beliefs, health advancement, and socio-economic stances have for centuries hindered the inclusivity of education, Middle East countries have adopted this education system to foster togetherness, educate parents, and improve international relations.

Again, it is policies that these countries have implemented and the rapport they have created with NGOs that have enabled full appreciation of inclusive education. This progressive inclusivity of education has also been associated with challenges such as inadequate resources and lack of specialists, and parents' resistance, among others. However, it is to everyone's benefit to include all children in the general classroom in any nation for its prosperity.

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