Progress in Education for Students with Intellectual Disabilities in Saudi Arabia: Evaluating Status

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Abstract

A systematic review of the literature was conducted in order to assess the current state of education in Saudi Arabia for students with intellectual disabilities in comparison with the rest of the developed world. It was found that the country has been able to keep up with technological advancements in the area, particularly with intensive application of assistive learning technologies in the classroom and has adopted an inclusive learning philosophy in its approach to helping students with intellectual disability. However, further progress is needed in pedagogical and social fronts of development, particularly in terms of training teachers and orienting parents effectively to address educational needs of students with intellectual disabilities.

Keywords: Education, Education technology, Intellectual Disability, Saudi Arabia

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An intellectual disability is defined as “a condition characterized by perceptible deficiencies in different aspects of functional performance” (Teather & Hillman, 2017). In order to be classified as having this condition, an individual must have a below average intelligence quotient and deficiencies in at least two functional areas among the following: communication, self-care, home life, social skills, self-direction, health and safety, academic career skills, leisure time and professional skills (Teather & Hillman, 2017). Proper education of students with intellectual disabilities has been and continues to be a significant concern in academic literature for the past decades (Teather & Hillman, 2017; Goodey, 2015; Hay et al., 2017; Ramey & Ramey, 1992), with various developments having been made in understanding how students with intellectual disabilities learn and what strategies can be effectively used in order to improve such students’ learning outcomes.

In Saudi Arabia, statistics collected in the early 2000’s showed that about 9% of disabilities in the country are classified as intellectual disabilities, and that diagnosis of intellectual disabilities are most common among school-aged (3-24 years old) members of the population (Alrowili, 2017; Japan International Cooperation Agency Planning and Evaluation Department, 2002). Despite this, development of programs to address the needs of students with intellectual disabilities were cultivated relatively later than in other first world countries (Alquraini, 2011; Alrowili, 2017). As discussed by Alquraini (2011), a combination of limited international diffusion of research on intellectual disability education prior to the rise of internet technology and the prevalence of various taboos about mental disability in Saudi Arabia contributed to this phenomenon. However, since then, the Ministry of Education in Saudi Arabia has explicitly acknowledged the need for significant improvements in the education system for students with intellectual disabilities and has launched numerous initiatives in this regard (Alrowili, 2017;

Aldabas, 2015; Battal, 2016). Government financial support for programs related to education for students with intellectual disabilities has been growing steadily since the establishment of the country's special education program in 1958 (Battal, 2016). However, there have also been criticisms on the quality of progress made in the area, and the extent to which steps taken by the Ministry of Education are aligned with research findings on intellectual disability across studies conducted in different countries (Alquraini, 2011; Aldabas, 2015). As such, in line with this, this study conducts a systematic review focused on examining the progress made by Saudi Arabia in its educational programs targeting the well-being and development of students with intellectual disabilities and examines the consistency of these programs from both theoretical and practical standpoints in comparison to what has been found and done in other countries. The goal of this review is to evaluate the current status of intellectual disability education in Saudi Arabia and based on this evaluation, suggest areas for further study.

Development of Education for Students with Intellectual Disabilities in Different Countries

Progress in education for students with intellectual disabilities has varied across different countries (Bouck & Flanagan, 2014; Castell, 2014; Soorenian, 2014). Typically, developed countries have led efforts in the study of how students with intellectual disabilities learn and how best to address their needs (Soorenian, 2014). It has also been found that the concept of intellectual disability has not been as well defined or culturally accepted in some countries, and this has led such countries to lag behind in intellectual disability education progress (Siperstein et al., 2009; Hay et al., 2007).

Systematically, different aspects of progress in education for students with intellectual disabilities can be categorized into three. These are advances in pedagogical theory, technological affordances, and external support services.

First, pedagogical theory for students with intellectual disabilities has undergone radical changes in the past decades (Campbell, 2002; Keogh, 2007; Tully et al., 2012). Initial approaches to intellectual disabilities treated the condition strictly as an impairment, and focused on the measurement of the limitations that students with the condition had (Keogh, 2007). As pointed out by Koegh (2007), the problem with this approach is that it leads to hamper the development of students with intellectual disabilities, as limits are placed on what they are capable of achieving. As such, this pedagogical perspective has declined, and given rise to critical pedagogy and sociocultural perspectives to education that view students with intellectual disabilities as differently-abled instead of disabled (Keogh, 2007). In line with this, various studies have come to support the idea that while students with intellectual disabilities do have difficulty in learning through commonly established pedagogical strategies, they are also capable of learning effectively through individualized methods, and are thus as unlimited in their capacity to understand information as other students who are not diagnosed with intellectual disabilities (McLaren, 1998; MacMillan & Reschly, 1998; Makkonen, 2002). As such, the prevailing pedagogical perspective with regard to teaching students with intellectual disabilities has become to identify the ways through which each individual learns best and to utilize that information in creating the personalized learning environment for that individual. This perspective is naturally challenging when considering the limitations of public education. However, a number of countries have passed legislation precisely towards investing resources in providing such

individualized education in all classrooms (Keogh, 2007). There is growing acknowledgement that with proper, early intervention, students with intellectual disabilities can grow up to take their place as highly productive members of society.

The second category of studies on education for students with intellectual disabilities focuses on developing technological advances to aid in such students' learning. Studies such as Van der Schuit et al. (2011), Hay et al. (2007), and Bouck and Flanagan (2014) examine different tools that have been constructed for the use of students with intellectual disabilities. For example, decades of progress have gone into the development of text-to-speech (TTS) tools for education, which is software that enables students to have auditory access to their learning material text on demand (Chang, 2017; van Santen et al., 1997). Such technological affordances have been found to significantly improve the reading ability of students with intellectual disability (Mahlburg, 2013; Evmenova & Behrmann, 2011; Castell, 2014). From a neuro-cognitive perspective, TTS works through repeated association, allowing students to listen to how words are spoken as much as they need until they are able to effectively associate the spoken words to their written equivalents (Van der Schuit et al., 2011). Similarly, interactive computer-based assistive learning systems have also been found to be effective in supporting the learning of students with intellectual disabilities (Van der Schuit et al., 2011; Hay et al., 2007). Students respond well to these mainly due to their access on-demand nature, which enables students to fit the use of the technology according to their specific preferences (Evmenova & Behrmann, 2011). Overall, consensus found in literature support the conclusion that students with intellectual disabilities fare better in classrooms that are equipped with interactive, computer-based assistive learning systems than in classrooms that do not (Mahlburg, 2013; Evmenova & Behrmann, 2011; Castell, 2014; Van der Schuit et al., 2011; Hay et al., 2007). However, Soorenian (2014) discussed that simply having the technology available may not be enough. Rather, it is likewise important for education professionals, from administrators to classroom teachers, to be knowledgeable about the nature of computer-based assisted learning systems and competent in their use and management (Soorenian, 2014). As such, sufficient training should be provided to these professionals, and their progress with the use of these tools where relevant should be adequately evaluated.

The third category of advances in education for students with intellectual disabilities is in the form of support programs that typically involve students' family members in the students' academic and interpersonal development. Siperstein et al. (2009) discussed in length how students' education must be viewed as a continuous process that goes beyond the classroom and that for students with intellectual disabilities specifically, the need for sufficient reinforcement outside the classroom becomes even more important. As such, various studies have advocated the need to involve immediate family members in the education of students, providing these people with the relevant information and tools that can enable them to assist the students properly in their studies when outside the school (Makkonen, 2002; Campbell et al., 2002; Siperstein et al., 2009). In line with this, various countries have established social service programs particularly for nurturing the education of students with intellectual disabilities through training and awareness events targeted towards such students' parents and guardians (Campbell et al., 2002; Siperstein et al., 2009).

Comparative Analysis with Progress in Saudi Arabia

As found in the previous section, considerable progress has been made towards improving education for students with intellectual disabilities in different countries. The extent to which each of the developmental fronts examined, pedagogical, technological, and social, have been explored in the Saudi Arabian educational system is the objective of this section.

Alquraini (2014) extensively discussed the development of special education in Saudi Arabia. Efforts to address the needs of students with intellectual disabilities in the country formally began in 1971, when the Ministry of Education officially recognized intellectual disability as one of the disabilities that the educational system must accommodate for (Alquraini, 2014). As such, the country has had over 4 decades to develop its capacity to address the needs of students with intellectual disabilities.

On the technological front, Saudi Arabia has engaged in various efforts to apply research-based technologies for students with intellectual disabilities in its classroom settings. Various sources note the extensive integration of assistive learning technologies in modernized public education classrooms in the country (Sadaawi, 2010; Aldabas, 2015; Battal, 2016). The driving force behind the country's aggressive classroom modernization scheme is the idea of inclusive education. Patterned from the Individuals with Disabilities Education Act (IDEA) in the United States, the Ministry of Education intends to effectively integrate students with intellectual disabilities in regular classrooms by making certain that the classrooms are fully equipped to support the needs of such students (Al-Mousa, 2010).

Alongside this modernization are efforts to professionally develop teachers in Saudi Arabia to be prepared in teaching classrooms with students that have intellectual disabilities. In Saudi Arabia, professional development programs have been implemented to train teachers for inclusive classroom teaching (Aldabas, 2015). However, inclusive education itself is not yet integrated into professional education curricula in Saudi Arabian universities (Aldabas, 2015). At the same time, various sources report on struggles that Saudi Arabian teachers have in adapting to the inclusive learning environment (Aldabas, 2015; Battal, 2016; Al-Mousa, 2010; Alrowili, 2017). According to Alquraini (2011), cultural and generational barriers persist that hinder many teachers from accepting and implementing fundamental changes that need to happen in Saudi Arabian classrooms for the benefit of current and future inclusive classes of students.

In terms of community involvement, Aldabas (2015) discussed in length how the current system in Saudi Arabia has yet to adapt formal, implementable features for involving the parents of students with intellectual disabilities actively in their children's education. This remains to be a challenge, particularly with the prevalence of cultural stigma in the country about having intellectual disabilities and mental illness in general (Alamri, 2016). As such, parents of students with intellectual disabilities in Saudi Arabia still need to be properly educated so that they will be able to adequately support their children's education at home, effectively augmenting efforts in the classroom.

Conclusions and Recommendations

Saudi Arabia has and continues to develop its capabilities for addressing the needs of students with intellectual disabilities in its public-school system. Similar to other developed countries, Saudi Arabia has been consistently upgrading their classroom facilities with assistive learning technologies that have been found to successfully aid students with intellectual disabilities in

functioning effectively in the classroom. However, the country still needs to improve in pedagogical and social fronts of educational development for students with intellectual disabilities. Current and future generations of teachers need to become adequately trained to handle inclusive classrooms, and parents of students with intellectual disabilities need to be better informed and incentivized to become better involved in their children's education.

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