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Learning Support Provisions for Post-secondary Students with Disabilities in Kuwait

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Abstract: This paper presents a study exploring the nature of learning support provisions for higher education students with disabilities in Kuwait. The research objectives were to (a) detail support for students in Kuwait higher education and identify any differences between public and private institutions, and (b) provide data for international comparisons with universities/colleges with experience of supporting students with disabilities. A questionnaire was distributed to the twelve institutions operating within Kuwait at the time of the study. Responses were received from one public and four private higher education universities/colleges. The data suggested that the levels of support for students with disabilities were relatively consistent with those provided by other countries, with one private college showing a good range of support strategies. However, as in many countries, there was great variability in the level of support offered. Comparisons between public and private institutions considered the number of students requiring learning support, the nature of their disabilities and the types of accommodations offered. Findings indicated that the public university showed levels of provisions that seemed more comprehensive than that reported by two of the private colleges, but less comprehensive than reported by the other two private institutions. Recommendations are shared on how to enhance existing support services further.

Keywords: Learning support, University students with disabilities, Accommodations, Kuwait education, Public-Private institutions, Arab-world comparisons

1. Introduction

The data reported in this paper details the sort of support provisions available for students with a disability in Kuwaiti higher education institutions. Given the education focus of the institution, the current paper discusses, primarily, education-based support and provisions. However, in Kuwait, disability support is often contained within student services that also support non-education issues, such as transport and access. Therefore, in order to access the information that we were looking for, we needed to ask for information about a range of support tools and procedures from which we could then identify education-based support. The focus of the work on educational issues also leads to an emphasis in this paper on the concept of learning disabilities, given that specific education supports in Kuwait are likely to be targeted at individuals with such education-focused disabilities. Therefore, this introduction concentrates on learning disabilities rather than other types of disability. Furthermore, the concept of learning disabilities in Kuwait has developed from a North American perspective (primarily, a USA viewpoint). Therefore, procedures to support students with learning disabilities are likely to be based on this perspective. When considering international comparisons with the situation in Kuwait, the current paper therefore focuses on similar contexts within the USA as these are likely to relate to the perspective of learning disabilities in Kuwait. Comparisons with other places may lead to differences in support processes due to a different perspective on learning disabilities. Finally, learning disabilities, as conceptualized in the USA and Kuwait, can be based on problems with literacy (reading/ writing) and/or mathematics. However, across higher education courses, literacy difficulties are more likely to impact on learning. Hence, the following pages focus on a background to literacy-related learning difficulties.

2. General Education in the Arab world

Education is a fundamental aspect of life in the 21st century and this is recognized as much in the Arab world as elsewhere (see http://www.alecso.org/publications/SLIBNU-ALECSO_BOOK.pdf for a wide-ranging discussion of education in the Arab world, including issues related to expenditure and planned development). In addition, literacy acquisition is one of the main elements of modern education. In their report on dyslexia, a Working Party of the Division of Educational and Child Psychology of the British Psychological Society stated that, "Education is a basic human need and a prerequisite for the achievement of development" and "entitlement to literacy is considered a basic human right and so reflects the central role of reading and writing in all societies" (1999: page 16; see also Elbeheri et al., 2012, for similar discussions related to Arabic). The importance of learning to read, specifically, and of literacy and education generally, is recognized by almost all countries of the world and appropriate literacy development for all has become "a global concern as countries attempt to reduce their level of illiteracy" (Firman, 2000: page 57; see also Elbeheri & Siang, 2022; McBride, 2019). An appreciation of the importance of literacy has led to a number of measures/ programs being adopted by various countries to support children in their literacy development, and the adoption of the UN Convention on the Rights of Persons with Disabilities, which includes statements that cover those with disabilities related to literacy acquisition. Many Arab countries have also been developing initiatives to reduce poor literacy levels. However, poor literacy levels are still common in Arabic speaking countries despite these efforts, suggesting a need for further effort and solutions (see discussions in Elbeheri & Siang, 2022).

Countries in many primarily Arabic speaking regions of the world (mainly North Africa and the Middle-east areas around the Levant and Gulf) have allocated a high percentage of government expenditures to education, which at times has exceeded that of other developing countries with similar per capita incomes – though, this has also been impacted by conflicts across the region. As a result, the region has able to improve equal access to education, and to reduce illiteracy rates. This is seen as a remarkable achievement, given that the region had some of the lowest educational indicators in the world in the 1960. However, in many Arab countries, the limited capacity of higher education institutions is associated with limitations on government spending. This situation is exacerbated by the growing youth population, which has been estimated to be one of the largest (based on proportion of population) in the world. This youth population, which is expected to continue to grow, creates a greater demand on higher

education, which in many places has led to an increase in universities and colleges in many Arab countries, often within the private sector. Despite this, the effectiveness of the Arab higher education system has been limited by high tuition fees in private universities and the movement of Arabic-speaking academics to institutions outside of the region. Other reasons include outdated university libraries, inappropriate admission systems and student assessment methods, low levels of expenditure on research and the dissemination of research, as reflected in the limited number of published research in international journals, and finally the decline in staff preparedness and educational materials.

Despite the problems faced in the region, the development of higher education has been acknowledged as of key importance for the Arab World. One of the first pan-Arabic reports to recognize this was the report of the Investment Climate in Arab Countries (2008). The report shows an increase in the number of universities in Arab countries, including private universities that have taken advantage of the increasing demand for post-secondary/adult education. The report identified that many Arab countries have adopted a policy to limit growth in the number of students admitted to public universities, and establish or expand the private sector, thereby increasing access to Higher Education while limiting costs to public spending. The report also indicated that Kuwait (where the current work was conducted) had one of the highest percentages of expenditure on higher education of the total public expenditure on education. However, consistent with many Arab countries, it has a mix of government-funded and private institutions focused on higher education students. Such increases in the number and capacity of private institutions operating in the region has led to pressure to embrace international perspectives and standards, including those related to special educational needs. These factors argue for the need for increased awareness about, and improved provisions for, students with disabilities in higher education institutions, both private and government funded.

3. Students with Disabilities in Post-secondary School Settings

The percentage of students with disabilities generally,

and students with learning disabilities in particular, in institutions of higher education is increasing in many countries around the world. Figures reported in the US of the estimated proportion of students with disabilities in all undergraduate programs of study typically represent around 9% of the total college population (see, for example, Leyser et al., 2011; see also Richardson, 2021). Similar increases have also been reported in other countries where English is the dominant language (e.g. Pumfrey, 2008; Ryan, 2007). Reasons for the increasing numbers are numerous, but can be considered to include better academic preparation, improved transition planning, and increased availability of funding and scholarships for this segment of the student population. Given such increases, there is a requirement on faculty to meet the needs of those students and to improve their inclusive practices and change their attitudes and mindset to enable those students to access higher education opportunities. (See discussions in: Arries, 1999; Belch, 2004; Daloiso, 2017; Du Pre et al., 2007; Elbeheri & Everatt, 2011; Elbeheri et al., 2020; Richardson, 2021)

Most courses and units being offered at colleges and universities depend on verbal skills in order to understand lectures, participate in class discussions and sometimes making oral presentations, read textbooks, read background literature about the subject being taught, complete writing exams and quiz papers, and submit written assignments. A percentage of students with disabilities find such skills challenging. This can have a negative impact on their contribution to class discussions and their academic performance, which may lead subsequently to the low grades or even failure to complete a qualification. In addition, some faculty members do not feel that it is their responsibility to modify the curriculum to grant those students access and accommodate them in the educational system at colleges and universities. While there exists a percentage of post-secondary school faculty members who are indeed sympathetic to the cause of those students, they may not know how to offer accommodations nor how to enable and grant those students access to the curriculum. Therefore, retention and degree completion of students with disabilities has also been an issue that needs addressing (Belch, 2004; Richardson, 2021; Stodden, 2001).

There are a number of different factors that

contribute to the success or failure of students with disabilities generally, and those with learning disabilities in particular, in post-secondary education settings. Such factors include students': cognitive and academic skills; motivation, study habits and compensatory skills; prior educational experiences; family support and family expectations; financial resources; and university/college support and accommodation systems (Hartzell & Compton, 1984; Murray & Wren, 2003; Richardson, 2021; Trammell, 2003; Wagner et al., 2005). Comparisons of university/college students with and without learning disabilities have suggested that students with learning disabilities often attain lower grades, and have a lower perception of their own academic abilities than students without learning disabilities (Everatt & Denston, 2020; Murray et al., 2000; see also Murray et al, 2014).

4. Education in Kuwait

The current research was undertaken in Kuwait, a country that has a reasonably long history of policy statements related to disabilities (see further discussions in AlSharhan & Everatt, 2022, with particular reference to policies related to learning disabilities that are a focus for the current paper). Article 13 of the Kuwait Constitution, issued in 1962, states, "Education is a fundamental requisite for the progress of society, assured and promoted by the State". Article 40 confirms that, "Education is a right for Kuwaitis, guaranteed by the State in accordance with law and within the limits of public policy and morals. Education in its preliminary stages shall be compulsory and free in accordance with law. The law shall lay down the necessary plan to eliminate illiteracy and the State shall devote particular care to the physical, moral and mental development of youth". It was those two articles of the Kuwait Constitution that paved the way shortly afterwards for Law Number 29 issued in 1966 "The Law of Higher Education in Kuwait", which laid the foundation for the establishment of Kuwait University in 1966, the first public university.

Currently, the education system in Kuwait is administered by the Ministry of Education & Higher Education, which supervises school education (until the end of 12th year of school), in addition to higher education beyond secondary school. As for post-secondary school education, the Ministry of Education & Higher Education supervises the two public institutions, the University of Kuwait and the Public Authority for Applied Education and Training. It also supervises some twenty licensed private universities and colleges via the Private Universities' Council. While the latter focusses on Kuwaiti students studying inside Kuwait, the Programme of Studies and Scholarships Abroad supervises Kuwaiti students studying abroad.

Higher education in Kuwait, similar to its international counterparts, hugely supports economic development and contributes to the development of human values. It provides Kuwait with necessary specialists, technicians and experts in various fields as required by local industry and the wider labour market. Consistent with this importance, Kuwait has in the past put a large amount of resources into developing higher education in the country within a relatively short period of time (i.e., since the foundation of Kuwait University in 1966): e.g., the Investment Climate in Arab Countries Annual Report (2008) indicated that Kuwait had the highest percentage of expenditure on higher education of the total public expenditure on education.

In addition to developments in the field of education, Kuwait has also experienced societal and national changes in the fields of disabilities and learning challenges in terms of awareness, advocacy, and recognition (see, for example, Nouf et al., 2020). Kuwait signed to be part of the United Nations Convention on the Rights of Persons with Disabilities in 2013. There are around 20 registered non-governmental organizations (charities) working in the field of disabilities in Kuwait. Some of those organizations are world and regional leaders and were established more than 40 years ago. In 1996, the Kuwaiti Parliament officially passed Law Number 49 (the "Care for the Disabled Law"), which acknowledged the rights of persons with disabilities and, in its Article 16, called for the creation of a unified body to coordinate, regulate, monitor and advocate for the rights of disabled individuals in Kuwait. Thus, the "Higher Council for Disabled Affairs" was created. Fourteen years later (in 2010), a new Law was issued (Law Number 8), which is known as the Persons with Disabilities Law. This, in turn, laid the foundation for the establishment of the Public Authority of Disabled Affairs, which is currently the independent

government body that advocates for the welfare of persons with disabilities in Kuwait. (See www.pada.gov.kw for current information about policy and procedures related to disability in Kuwait; and https://www.pada.gov.kw/en/authority-law/ for information on laws related to disability.) The Public Authority for Disabled Affairs maintains active files for persons with disabilities in Kuwait. (See further discussions of laws and provisions in Kuwait in comparison to four other countries, including the USA, in Ochoa et al., 2017.) Recent statistics (see **Table 1** for an overview of these) released by Public Authority for Disabled Affairs indicate that in 2023 there were around 60,899 active files for persons with disabilities in Kuwait, with these being classified into nine main categories as represented in **Table 1**.

Table 1. Active files with the Public Authority for Disabled Affairs by disability type

Disability Type(presented in order of magnitude of the disability type)	Number of Active Files(with percentage of total rounded to nearest whole number)
Intellectual	13,951 (23%)
Motor	13,153 (22%)
Physical	9,573 (16%)
Not specified	6,569 (11%)
Educational	5,339 (9%)
Hearing	4,611 (8%)
Visual	4,606 (8%)
Physiological	1,653 (3%)
Developmental	1,444 (2%)

Accessed from https://www.pada.gov.kw/en/information-center/statistics/ (June 2023)

The percentage of persons with reported disabilities with an active government file, in Kuwait represent around 4% of the population of the country. This may be considered lower than expected, but there are still stigmas related to disability in Kuwait society. (See, for example, Almoosa et al., 2012, on meetings the needs of all students; Abdalla & St Louis, 2012, and Irani et al., 2014, on stuttering; Hughes et al., 2014, on hearing loss; Scior et al., 2013, on intellectual disability; and Elbeheri et al., 2012, on dyslexia.) Therefore, official identification and reporting would be expected to be lower than in some other countries (in contrast to reports from chapters in Elbeheri & Siang, 2022). Improvements in awareness of, and attitudes towards, disabilities would likely lead to an increase in reporting.

Given the importance for post-secondary level education in Kuwait, and its role towards ensuring that this sector of education enables generation of human capital to contribute towards developing the country, and being mindful of the additional care necessitated by the prerequisites of human and societal needs, the current study aims to examine the level of learning support provisions available at both public and private universities in Kuwait. Such a study will enable future comparisons to be made between Kuwait and its regional and international counterparts, and will provide data on the current state of affairs regarding learning support provisions in Kuwait across public and private institutions. Recommendations at the end of this paper are intended to propose ways of improving services, particularly for students with learning disabilities.

5. Method

As there are no earlier studies about learning support provisions for post-secondary students with disabilities in Kuwait, an exploratory research design was selected. This incorporated a descriptive survey method: i.e., a questionnaire survey was distributed to the target organisations, with the responses being described in this paper. This type of research is not intended to provide conclusive evidence, but helps us to have a better understanding of learning support provisions for students with disabilities in Kuwait. At the time we conducted the research, Kuwait had twelve operating academic institutions in total. Data were collected using a structured questionnaire (see **Table 2**) distributed to all higher education institutions in Kuwait.

Table 2. Open-ended questions distributed to higher education institutes in Kuwait

Services Offered to People with Disabilities in Kuwaiti Higher Education Institutions
Kindly provide us with the requested information to the best of your knowledge and as accurately as possible. If you do not know an answer to any of the questions, you are requested to write "We do not know". If any of the questions do not apply to your institution's policies and procedures, you are requested to write "Not applicable".

The name of the Institution
The academic degrees offered by the institution (Diploma, Bachelor, Master's.)
Does the institution accept students with disabilities?
What type of disabilities does your institution accept?
How many students are officially registered as "students with disabilities" in your institution?
What documents do you require from a student to be registered as a "student with disability"?
Do you have policies and procedures that are specific to "students with disabilities" or are they treated like the rest of students?
Does your institution offer any learning support provisions to students with disabilities to help them in the learning process?
What are the learning support provisions your institution provides to students with disabilities?
Is there a Unit or a Department in your institution that attends to the needs of these students?
If there is a Unit or Department in charge of students with disabilities, under what Administration does it come (Students' Affairs or Admission and Registration…)?
Are there certain departments or majors in your institution that students with disabilities cannot apply to?
Do you wish to add any other information that we failed to ask about?

Table 2 presents the open-ended questions that were sent to institutions. Questions were written in Arabic; with **Table 2** showing translations into English. In addition, space was provided next to and underneath each question for written responses. Questionnaires were written on official papers of the academic institution of the first author and posted to all higher education institutions in Kuwait. The questionnaire was accompanied by a headed letter explaining the purpose of the study and clarifying how best to answer the questions. Only written official responses, on headed paper or with an official stamp, from the responding academic institutions were accepted as responses and used in the current paper. These responses were from offices of a Dean or Students Services with the institutions.

Responses were received from five (one public and four private) academic institutions. The questionnaire asked for background information, such as the name of academic institution and the academic award(s) granted. In addition, the questionnaire asked whether the academic institution admits students with disabilities or not. If the institution answered yes to this question (and all responses were yes to this question), then data on the types of disabilities accepted and their numbers was asked for. In addition, the questionnaire asked for information on the existing policies and procedures specifically targeted towards assisting students with disabilities adopted by the academic institution. Where applicable, the organizational division/s under which these policies fall, and the persons implementing them,

were also included in answers. Finally, questions asking for information on the types and levels of accommodation and/or support on offer for students with disabilities were included.

The public university responses were taken as representative of the official government-based position within Kuwait. The four private universities/colleges were considered to give a reasonable sample of the perspectives of the eleven operational private higher education institutions in Kuwait. Questionnaire reports indicated that all but one of the five institutions were four-year post-secondary institutions awarding a bachelor degree. The public university (A in **Table 2**) also had post-graduate programs leading to master and/or doctorate degrees. One college only (B in **Table 2**) offered two-year academic programs leading to a diploma. The five institutions varied widely in terms of the size of their student body. The largest of the five was the public university with a total active undergraduate enrolment of approximately 37,000 students at the time of the study. The private academic institutions each had a total active enrolment ranging from 1,000 to 5,000 students. These data were consistent with reported statistics across the higher education sector in Kuwait.

6. Results and Discussion

Each of the five academic institutions reported that it accepts students with disabilities in some or all of its degree/diploma programs. This reporting was in-line with Law Number 8/2010, which mandates

accessibility to post-secondary education for qualified students with disabilities. All five institutions actively enrolled students who had been identified with different types of disabilities. This included students with orthopedic impairments, hearing impairments, visual impairments, learning disabilities, difficulties reported as slow learning and mild intellectual disabilities, autism spectrum disorders, and other health impairments. Institute E, in **Table 2**, reported the highest percentage of actively enrolled students with disabilities (3%) among its student body of 3,500. This was followed by institute D with 1.4% of its student body reported as having some form of disability. The other three institutions each reported that less than 1% (A = 0.6%, B = 0.3%, C = 0.1%) of their students were identified with a disability. These percentages of students with reported disabilities were quite low in comparison with countries with a history of inclusion of students with disabilities, but they may be considered as more consistent with the general population figures for Kuwait discussed above. It is anticipated that such a percentage will increase with time with increasing levels of awareness, advancements in the uses of assistive technology and increased awareness levels amongst faculty members regarding how to support students with disabilities in post-secondary school settings.

To facilitate the analysis of learning support provision at each of the institutions, the information gathered from the responses was classified into six categories of services (see **Table 3**), determined by Rath and Royer (2002) as those typically made available by post-secondary institutions to students with disabilities to encourage their academic success. The list of service categories was compiled based upon an expansive literature review of research studies that looked into the nature and effectiveness of services provided to post-secondary students with disabilities in the United States and Canada. The service types included in these categories were ones specifically aimed at student learning and academic achievement. They do not include service or support types intended for physical accessibility, special financial aid, or job market transition. Examples of accommodations that have been used frequently to assist students with disabilities with their learning needs include books on tapes, extended times in exams, permission to take exams in different locations, note takers, readers and use of word processors during exams. Since the primary focus of this exploratory study was on learning support, using Rath and Royer's six categories of academic support as a reference for the data analysis met the research aims.

Table 3. Type and availability of learning support services at the five institutions classified according to Rath and Royer (2002)

Support	Institution A B C D E					Positive Aspects	Negative Aspects
1. Assistive technologies and programs (recorded text, readers, computer programs, etc.)	√	√?	√?	√	√	• Can allow studies independent of a tutor • May by-pass some of the difficulties associated with a disability	• Students may become overly reliant on technology that may not be available after college • Does not address fundamental skill problems related to the disability • Some are expensive and human assistance may be limited because of scheduling
2. Program modifications (modified tests, modified course requirements)	×	×	×	√	√	• Makes college success more obtainable despite the disability • Highly cost-effective	• Modified tests and regular tests may measure different things • Modified programs of study may be of lesser quality
3. Direct assistance (tutoring, remedial classes)	×	×	×	√	×	• Often aimed at reducing weaknesses in skills • Gives students opportunity for one-on-one instruction	• Tutors may foster reliance rather than independence • Remedial classes may be easier than non-remedial classes • Offering remedial classes is expensive

Continuation Table:

Support	Institution					Positive Aspects	Negative Aspects
	A	B	C	D	E		
4. Therapy and counselling (emotional, social guidance, etc.)	√	×	×	√	√	• Can help a student cope with problems associated with having a disability • Help with student class selection choices	• Improper counsellor training can result in counterproductive outcomes • Does not address academic problems
5. Strategy training (memory, specific skills, etc.)	×	×	×	√?	×	• Helps students develop higher levels of competency in a variety of fields • Encourages independent learning	• Requires extensive time commitment and substantial monetary investment
6. "Disability Attacking" Interventions (reading and math training, etc.)	×	×	×	√	×	• Improves specific skills that are deficient as a result of the disability • May foster academic independence and self-efficacy	• Requires extensive time commitment and substantial monetary investment

Key: √ = Available; × = Not Available; √? = Available to a limited extent, or targeted to all students.

A = Public University; B-E = Private Academic Institutions.

Table 3 lists the six types of learning support reported in the questionnaire responses, and the availability of each type in the five reporting academic institutions. Each support service described by the respondents was examined for inclusion under one of the six intervention types, excluding support or services that are not directly linked to student learning, such as classroom location, transport services, employment, modified admission criteria, etc. The table also includes a summary of positive and negative aspects of the six intervention types as outlined by Rath and Royer (2002, p. 376).

The findings reported in **Table 3** suggest that the types of support for students with disabilities reported by at least some Kuwaiti higher education institutions were not too dissimilar from those found in institutions with established experience in serving students with disabilities: i.e. those in the USA and Canada where similar questionnaires have been used (Rath & Royer, 2002). All institutions in this study offered typical support apparatuses, focused around assistive technology, to a greater or lesser degree. Three of the five also offered assistance in terms of counselling. There was also evidence of varied degrees of logistical and program modifications across the institutions. However, the findings also indicated a degree of variability in provisions, which may be indicative of differences in ethos, and/or academic focus, across institutions. At least one of the institutions indicated services consistent with supporting students with specific learning difficulties/disabilities, whereas those institutions that focused more on assistive technology provisions may be more likely to concentrate on students with more perceptual/sensory or motor disabilities. These potential differences in provisions, and the potential effectiveness of targeted provisions within institutions, are additional areas for future research. Differences in provision were not simply due to divisions between public and private institutions. While the public university showed levels of provisions that seemed more comprehensive than two of the private colleges, its support procedures seemed less comprehensive than the other two private institutions.

The two private institutions with the highest percentage of students with disabilities offered the most comprehensive set of learning support interventions, with one of them (institution D in **Table 2**) offering what might be considered an exemplary model of learning support to its students with disabilities, at least in terms of support provided within Kuwait. This academic institution has a dedicated learning support unit that provides individual or small-group

"disability attacking" interventions, such as reading and math training, along with strategies designed to alleviate disability-specific deficiencies, such as memory and attention deficits. The availability of this high level of learning support is surprising given the relatively short history of post-secondary education of students with disabilities in Kuwait. Research suggests that interventions designed to improve weaknesses related to a learning disability (such as reading, math, or writing interventions) are more likely to result in higher success rates than "compliance interventions" that are in place to meet the requirements established by law (Rath & Royer, 2002; Troiano et al., 2010). Again, the potential effectiveness of those targeted interventions requires further investigation including the quality of services inside and outside the classroom, but the evidence of their development within academic institutions in Kuwait indicates that such comprehensive support can occur even within a context of relative inexperience of accommodations for differences in learning.

7. Conclusions

Providing effective help and support for students with disabilities in post-secondary school settings in Kuwait requires a cooperative approach from the many stakeholders involved in the process such as students, peers, tutors, faculty members, admission officers, administrators and academic advisors. Such support, at its core, requires the utmost support and understanding from all those involved. The way forward in the Arab world is no different from that which has gone before in other parts of the world; i.e., raise awareness, develop appropriate assessment tools, identify effective support procedures and apply good policy. Given this, learning from each other is a real possibility. However, it is probably true to say that in the Arab world efforts to increase awareness about students with disabilities generally and those with learning disabilities in particular are vital given the fact that previous research has shown high levels of lack of awareness (e.g., Elbeheri et al, 2012). This needs to be done through formal education, government policy, advocacy groups, and professional organizations. Many faculty members working in colleges and universities in Kuwait (whether public or private) shy away from working with students with disabilities because they feel ill-equipped to teach them. Therefore, the value of faculty members training in disability awareness and disability related best practices cannot be underestimated. Such training is critical to increase instructor knowledge and awareness about the nature of disabilities and how to accommodate students with disabilities in the learning environment and learning opportunities made available to them.

The negative stigma associated with something referred to as a disability requires particular awareness/advocacy work (or government policy needs to allow resources to be allocated to conditions that are not referred to as a disability – potentially a less likely outcome). Appropriate methods of assessing and supporting students with disabilities at post-secondary school level need to be developed. In addition, culturally acceptable and linguistically fair tests that are nationally standardized also need to be developed for students in Kuwait to enable accurate assessment; which is always the first step towards timely intervention. Currently, there is indeed a critical lack of such appropriate tools in Kuwait. Once those tools (measures) are developed, the need to train and build capacity amongst psychologists performing the assessment at those post-secondary school institutions will also need to be addressed.

However, governments across the region will need to consider adopting new laws and policies to support individuals with learning disabilities, such as dyslexia, and there is clearly a need for more funding in the field of dyslexia research that informs practice. Academic and support staff must be able to implement reasonable adjustments to ensure that no student is denied the opportunity to enjoy all the benefits of higher education. Appropriate legislative, policy, and funding frameworks in higher education institutes can increase the proportion of university students declaring a disability at all levels of study. Professional awareness about dyslexia is much lower in Arab higher education institutions than in Norther American and European counterparts, and higher education legislation/regulations are inadequate in most cases to deal with students with special needs. This may require a re-consideration of the aims of higher education (perhaps all of education) and detailed learning outcomes from programmes that are open and justifiable. Overall, then, there is much work still to be done, but there

is a momentum that, if continued, should provide great advances in the provisions available for Arabic speaking students with disabilities attending higher education in Kuwait.

The aim of this paper was to explore the nature of learning support provisions for university/college students with disabilities in the State of Kuwait. An exploratory research design was selected and a census approach was utilized – we used to descriptive survey to gather the information reported in this paper. Responses were received from five academic institutions: one public and four private. Clearly, a descriptive survey such as this has its limitations. We are dependent on the responding offices to be honest and knowledgeable in their answers. We assured institutions that we would not name them in our reporting of the findings. However, the small number of higher education institutions in Kuwait may have led to a feeling that even basic information about an institution (such as numbers of students) may identify them to those in authority. Hence, there may have been some response bias in the answer given – a tendency to feel that certain response (potentially about access) would be required due to ministry regulations. However, the detail provided by a number of responding institutions suggested that issues of supporting learning for those with a disability was a major consideration of many of the responding institutions, and suggests that responses were more than simply tick-box answers based on regulatory requirements. This may not be true of the non-responding institutions, though. Of the twelve in operation at the time of data collection, seven did not make an official response. The reasons for this were not pursued, but may indicate that there was not an office responsible for measures related to disability or that those in the office felt that they were not able to reply. Clearly, further research is necessary to determine further the extent of support available, including asking lecturing staff and students if the statements of administrative officers translate into practice in courses (though see Elbeheri et al. 2020, for some data from lecturing staff in Kuwait). The current data, however, can be used to build upon, and will be useful to discuss changes that may have happened since these data were collected. For example, the current study was conducted prior to the start of the Covid-19 pandemic. It would be interesting to see what changes this has led to, particularly in terms of online support. Again, a limitation of the current study is that it is looking at a single time point and measures to support those with a disability will change over time.

Despite these limitations, the findings suggest that the two private institutions with the highest percentage of students with disabilities offered the most comprehensive set of learning support interventions. In terms of international comparisons, the data suggested that levels of support for students with disabilities were comparable to other countries, but there was great variability in the type and level of support offered. Although it has been argued that inclusion of individuals with disabilities can be considered as an indication of educational development (De Boer et al., 2011), it has also been viewed as a major challenge for modern education systems (Mitchell, 2010). The current study indicates that progress in more inclusive practices and targeted accommodations is possible despite the challenges.

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Original Research Article

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Guidelines from Educational Psychology for Education Reform in Barbados

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Abstract: The field of educational psychology has produced extensive research evidence that can inform efforts to facilitate reform of education systems in many parts of the world. Currently, major reforms to the education system at the primary and secondary school levels are being considered in the small island state of Barbados, in the West Indies. This article suggests guidelines for reforming school education in Barbados that draw on international research evidence from educational psychology. The guidelines are conceptualized using the acronym PERFORMING to focus on ensuring that the education reforms are: *Practicable, Effective, Relevant, Fair, Outcome-focused, Research-based, Modern, Inclusive, Nationally-equitable, and Globally-Competitive.*
Keywords: Education reform; Educational psychology; Primary schools; Secondary schools

1. Introduction

The Ministry of Education (MoE) in Barbados is considering major reforms to the education system at the primary and secondary school levels. This is due to concerns about poor academic outcomes and increasing levels of disruptive and violent behavior in schools that have been increasing in recent years. These have been highlighted by the challenges presented during the Covid pandemic and its aftermath in terms of apparent learning losses.

Barbados is a small island state in the West Indies region with a population of around 270,000 people.

The education system in Barbados has its roots in the sugar-cane plantation slave-based society that characterized most of the English-speaking Caribbean in the colonial period from the 1630s onwards. During this period, wealthy planters sent their children to be educated in Britain, while educational opportunities for the enslaved population were minimal. Between the end of slavery in the 1830s and independence in the 1960s, colonial educational systems in the Caribbean continued to be elitist in allowing for the selection of a small number of high-achieving students to attend prestigious secondary schools (Pilgrim et al., 2017). It is a legacy that has endured, despite the expansion

of secondary school systems across the Caribbean to achieve the realization of universal secondary education (De Lisle, 2012).

In the colonial period in Barbados, each secondary school had its own entrance examination. But in 1959, there was the introduction of what is today known as the 11 plus examination, which is a standardised test for students between the ages of 10 and 12 used for allocating places in secondary schools. Therefore, a key legacy of the colonial era, that has remained in place across the Caribbean, is a high-stakes examination underpinning selective systems for transition to secondary schools that are stratified, segregated and elitist (De Lisle, 2012). Addressing this issue is a major driver for education reform in Barbados.

The Barbados MoE recently proposed that the education reforms should be guided by the key values of being *Fair, Inclusive, Relevant* and *Modern*. These values are important considerations in education reform, but, based on currently available research evidence in educational psychology, do not address all relevant issues, so it is proposed that these be extended by using the acronym PERFORMING, which the author has suggested provides an educational psychology based framework for considering and evaluating various aspects of the reforms needed. These focus on ensuring that the education reforms are: *Practicable, Effective, Relevant, Fair, Outcome-focused, Research-based, Modern, Inclusive, Nationally-equitable, and Globally-Competitive.*

2. Practicable

First and foremost, education reforms must address the major problematic issues with the current education system and be able to be implemented within the resources available, with minimal disruption to the education of current students and within the shortest possible timeframe. It is also important to consider the sustainability of any proposed changes and not attempt a 'quick-fix' or be swayed by 'in-vogue' ideas that will not bring long-term positive results. Therefore, it is useful to consider what the findings of research on educational psychology indicate about reforming education and apply them to the issue of proposed education reform in Barbados.

A major part of current MoE proposals for education reform is the addition of junior academies (middle schools) for attendance in between primary and secondary schools. No rationale has been provided for this, which is being proposed in spite of there being a lack of evidence about the benefits of middle schools on improving education outcomes in the educational psychology literature, as indicated by the quotation that, '…large scale quantitative investigations and evaluations of the middle school model are lacking' (Olofson & Knight, 2018, p.1/2).

It is also the case that introducing middle schools will not address the major problematic issue with the Barbados education system, which is considered to be the extensive under-achievement of pupils in primary schools, long thought to be due to the intense focus on the 11 plus examination (Galloway & Upton, 1990). The 11 plus examination is a high-stakes examination that is considered to be a divisive means for selective transfer from primary to secondary schools. Whereas, the most equitable way of organising this transfer would be replacing the 11 plus examination as the basis for transfer to secondary schools with geographical zoning. Such zoning focuses on developing inclusive community schools supporting diverse populations, that previous research has shown can bring about improved overall academic outcomes (OECD, 2016; Pilgrim et al., 2017; Pilgrim & Hornby, 2019; Schleicher, 2018).

In addition, the implementation of middle schools in Barbados would require the development of relevant curricula, training of teachers and the adaptation of existing schools specifically for this age group, as well as possibly building some new schools. This is therefore a very expensive project that would take many years to fully implement which would be disruptive to the education of current students. Furthermore, the idea has already been rejected by former secondary school principals (Barbados Today, 2023) and other education experts in Barbados, who have noted that other countries, such as Bermuda, which is similar in many ways to Barbados, are closing down their middle schools because of the higher costs of having a three-tier education system and concerns about its effectiveness in raising education standards (Lagan, 2023). The available evidence should therefore clearly rule out changing to a three-tier system of primary, middle and secondary schools, since changing to such a three-tier education system is just not justifiable based on available evidence or in reality practicable at this

time.

3. Effective

Analysis of data from the UK (Bolton, 2012; Hornby, 2021) suggests that removing the 11 plus regime will lead to improved academic outcomes. Since primary school teachers will no longer need to teach children to do well on the 11 plus examination it will enable them to concentrate on, and be more effective in, their most important task, that is, the teaching of literacy and numeracy in order to ensure that as many pupils as possible develop a high enough level of these skills to be able to be successful at secondary school. Without the focus on the 11 plus examination, teachers will have more time to combine regular normative assessments with targeted criterion referenced testing in order to facilitate more effective teaching and learning (Hattie, 2009; Hornby & Greaves, 2022). This has been recently introduced into primary schools in Barbados, to target teaching on areas that need to be developed, for individual children as well as for entire classes, thereby ensuring that teaching is effective in optimizing learning for all pupils. When fully implemented, this should help bring about a significant increase in the proportion of children leaving primary schools with adequate reading, writing and mathematics skills for successfully completing their secondary education.

In addition to better facilitating academic learning without the 11 plus regime, primary school teachers will also be able to focus more on personal and interpersonal skill development through teaching social and emotional learning programmes. Teachers will be able to use strategies such as Circle Time (Kelly, 1999) and other personal and social development programmes (Durlak, et al., 2011) to create positive learning environments that help to prevent disruptive and violent behaviour, reduce bullying to a minimum, and prevent the development of mental health problems (Atkinson & Hornby, 2002). In this way they will be able to focus on the development of the so-called soft skills, including teamwork, communication, time management, conflict resolution and problem-solving skills, that many people consider essential for being successful in achieving vocational and life goals.

The result of these changes will be that many more children will be able to move on to secondary school with the basic academic skills, confidence and interpersonal skills needed for success, than is the case under the 11-plus regime that currently exists.

4. Relevant

National education goals and priorities in Barbados include enabling as many of the population as possible to become citizens who can live fulfilling lives, contributing to the communities in which they live, while at the same time providing the skilled workforce needed for making Barbados competitive in the 21st century world. This requires an education system from pre-school through to tertiary education with relevant curricula and effective teaching in order to produce optimal outcomes (Schleicher, 2018). However, a major problem is that the overwhelmingly academic curriculum in secondary schools is not relevant to the education of many pupils (Hornby, 2019a).

An important part of education reform must therefore be to ensure that secondary schools place greater emphasis on technical and vocational education by making these attractive alternative options during the later stages of secondary schooling. So, while all students will study mainly academic subjects with some technical/vocational courses in the first few years of secondary schooling, there should be a point when they decide which type of programme to concentrate on. This is the case in many other countries such as Finland, Poland, Germany and the Netherlands (Schleicher, 2018).

This could be implemented in Barbados by allowing students to opt whether to follow a curriculum focused on more practical knowledge and skills, such as that required by the Caribbean Secondary Education Certificate (CSEC), or a more technical and vocational education required by the Caribbean Vocational Qualifications (CVQ), during their fourth and fifth form years. These more practically or vocationally focused curricula should be promoted as useful options alongside the more academically focused curriculum taken by students aiming to sit Caribbean Examination Council (CXC) examinations.

So, whereas students following an academic programme and sitting CXCs would be aiming to go on to sixth form classes and then university, those following the technical and vocational route to prepare for taking CVQs would be aiming to go on to institutions such as community colleges, polytechnics

or hospitality schools and those following a more practical programme and taking the CSEC will be aiming to leave school at age 16 years to get jobs.

Providing a choice between academic, practical or technical/vocational programmes will require the development of a suite of practical, technical and vocational courses to make up a substantial part of the 4th and 5th form years for those students who opt for these tracks.

5. Fair

Central to the concept of fairness is equity in education and valuing all learners equally. The equity agenda is regarded not only as a social justice imperative but also as a way of ensuring that resources are used effectively in the pursuit of national prosperity. Schleicher (2018) emphasises that where optimum opportunities are available for all members of a society to develop skills and achieve success in the educational process, they are likely to participate more fully in economic, social, civic and political processes. They are also less likely to be a burden to society in terms of physical and mental health costs and involvement in crime. It is critical therefore that Barbados should reflect on the capacity of its education system to promote equity.

Therefore, one of the key values in education reform must be abandoning selection using a high-stakes test (the 11 plus) that segregates children by ability at an early age (Pilgrim et al., 2017). This will allow all children to benefit from developing literacy and numeracy skills within a broad curriculum for as long as possible. Across the OECD countries, for example, the typical age at which school systems begin to select students is 14 years (Schleicher, 2018). So selecting students at age 11 is considered too early and using high-stakes tests such as the 11 plus examination to do this is therefore counterproductive. In addition, delaying selection has been found to reduce the effects of socio-economic factors on achievement and to improve equity, as well as overall education outcomes.

With regard to socio-economic factors, it should not be surprising that private schools in Barbados, with more middle-class intakes, superior resources and smaller class sizes typically do better at preparing children for an examination like the 11 plus. The reforms suggested in this article include ensuring schools in less wealthy areas have additional resources

and support for helping pupils who are struggling. This would lead to improvements in overall levels of literacy and numeracy in government primary schools, thereby increasing equity by narrowing the gap between them and private schools.

6. Outcome-focused

Educational psychology theory emphasises that, when considering the processes involved in education reform, it is important to focus on the desired outcomes of the education system (Hattie, 2009). Currently around 80 % of young people in Barbados are estimated to leave high school without obtaining at least four subjects at CXE (Walrond, 2016). So only around 20% gain certificates that allow them to access jobs that can lead to good careers or to carry on their education in sixth forms and beyond.

But what if this were the other way round and 80% were leaving school with good qualifications and only 20% without? But surely this is a pipe dream and impossible to achieve. Well actually, no its not. This is now the case in New Zealand. But it was not always so. In 1971 outcomes were similar to what they are now in Barbados, that is at age 16 only around 20% achieved four or more certificates in the equivalent of CXE, and around 80% left school as academic failures.

Thirty years later, by 2001, secondary schools had adopted a credit-based system with three levels of the New Zealand Certificate of Educational Achievement (NZCEA), the first taken at age 16 years. Each can be obtained by gaining 80 credits at one of three achievement levels, Achieved, Merit and Excellence. Around 4% are awarded NZCEA with Excellence, 16 % with Merit and 60% with Achieved. The 20% who do not pass are able to return to school to obtain the necessary credits to gain NZCEA in the future if they want to. This suggests that future education reforms in Barbados should consider the development of such a credit-based system in secondary schools, based on continuous assessments as well as examinations, to replace the exclusively examination based one currently in place.

7. Research-based

A key part of education reform must be that teachers are helped to abandon some traditional ineffective approaches and be encouraged to use a range of

teaching techniques and strategies that are based on solid research evidence of their effectiveness in facilitating student learning (Hattie, 2009; Hornby, 2022). In order to facilitate this, eight key evidence-based strategies that can be used by all teachers to improve student outcomes have been identified from the research literature on educational interventions. Guidelines for using these strategies, along with links to videos of them being used in classrooms to help teachers learn how to use them effectively, have recently been published (Hornby & Greaves, 2022). The eight strategies are: *teacher-student rapport*; *formative assessment*; *direct instruction*; *teaching metacognitive strategies*; *peer tutoring*; *cooperative learning; functional behavior analysis*; and, *parental involvement.*

The rationale for using these eight strategies is that developing *teacher-student rapport* is a pre-cursor to facilitating optimal learning, while use of f*ormative assessment* enables teachers to identify student's strengths and needs and to plan their teaching to address these. *Direct instruction* provides a guide to teachers in the steps needed for effective teaching and *teaching metacognitive strategies* helps students to learn more effectively. Implementing *peer tutoring* strategies helps students to learn together in order to maximise achievement and *cooperative learning* strategies facilitate social and academic learning. *Functional behavior analysis* facilitates the management of student behavior and prevents classroom disruption and supporting *parental involvement* both at school and in the home produces optimal academic and social outcomes. Providing training to support teachers in implementing these and other research-based strategies needs to be an essential part of education reform.

8. Modern

Education reforms must include modernization of classrooms in all schools. For example, in Barbadian classrooms chalk and blackboards need to be replaced with more recent technology, in which every classroom in primary, secondary and special schools have an interactive whiteboard with a reliable internet connection. These can be operated from a lap top computer which is assigned to each teacher so they can take it home each evening to prepare lessons on it.

The interactive whiteboard combines verbal, auditory and tactile learning modes and multisensory methods to encourage participation (Thomas & Schmid, 2010). It scaffolds learning through its technical and pedagogical interactivity. Its multimodal interface fosters learning across the curriculum with pupils of all ages and those with special needs. This sophisticated technology will require training for teachers so that they can make best use of its wide range of applications.

In primary schools use of interactive whiteboards will improve the teaching of literacy and numeracy. In secondary schools it will enhance teaching across the curriculum from arts subjects through technical and vocational education. In special schools and classes it will increase engagement in learning of children with a wide range of special needs. This initiative will be a major expense that will require gaining funding from external agencies, service clubs, and the business community, but is an important example of modernising the education system by using the most up-to-date technology available.

9. Inclusive

The MoE needs to have a published policy on the inclusion and education of children with special educational needs and disabilities (SEND). This policy must reflect the current reality in Barbados that the vast majority of these children are currently educated in mainstream schools, with a small minority, those with more severe and complex needs, being educated in special schools or special units attached to mainstream schools (Hornby, 2019b). There is a need for specific legislation on children with SEND that specifies the responsibilities for meeting special needs of both the MoE and schools. For example, in the USA, legislation specifies six principles: accepting students with SEND and providing needed services; children being formally assessed and parents receiving guidelines about the services available; schools being required to set up Individualized Education Programs (IEPs) for all children with significant special needs; schools being required to educate children in mainstream schools to the maximum extent possible; parents being fully involved in designing programs; and, having safeguards to ensure children's rights are maintained (Hornby, 2014).

The MoE should provide guidelines for schools that must be followed, for example, using IEPs for those

children with significant special needs, and support from teacher-aides for those with less severe needs. Every school, primary and secondary, should be required to have a qualified Special Needs or Learning Support Coordinator. That is a teacher to coordinate the schools' special needs provision, identify children with SEND, provide support and guidance to teachers, and liaise with the MoE, other agencies and parents (Hornby, 2014).

Professional development on teaching children with SEND should be provided for teachers in all mainstream schools through input into initial training and ongoing in-service training. Advanced training should also be made available for teachers in special schools and special unit classes, and for Learning Support/Special Needs Coordinators.

MoE educational psychologists should conduct assessments of individual children with SEND and provide guidance to schools about appropriate programs. The MoE should establish a national Parent Partnership Service to work with parents of children with SEND to help them access the most appropriate education and other services for their children, as well as offer parent education and support (Gordon-Gould & Hornby, 2023). The above changes will ensure that the education system is as inclusive as possible for pupils with SEND.

10. Nationally equitable

The implementation of zoning will ensure that all children attend schools in their local communities. So all schools will become neighborhood community schools, which have been found to be the most effective type (Schleicher, 2018). Therefore, students will not need to spend time travelling to secondary school by long bus trips as they will be able to attend the school nearest to their homes. They will be able to put all their energy into their studies at school and will be able to return home with some energy left to do homework, which for many children, due to the extensive travel required under the current organization of secondary schools, is not the case. Also, children will be able to attend their local primary schools, as there will be no need for parents who can afford to do so to drive them to schools that have good reputations for 11 plus results, because transfer to secondary schools will be based on the zones where they live.

Involvement of parents and other family members in the education of their children, both at home and at school, is an essential component of effective education (Hornby, 2011). Having children attend schools in their local communities enables parents to support the school more easily and to be more able to attend parent-teacher meetings, be involved in the school's Parent Teacher Association and engage in other activities based at the school. It also facilitates improved pupil behavior at school since parents can be more easily involved in behaviour management procedures, such as home-school behaviour programs (Hornby, 2011).

Greater involvement of people from the community in which schools are based is possible with neighborhood community schools (OECD, 2016; Schleicher, 2018). Faith leaders and people from the local business community are more likely to associate themselves with local schools and thereby be able to provide support for these schools. The involvement of community leaders in schools supports the maintenance of good discipline and provides links to sources of work experience and jobs for school leavers.

School Boards of Management should therefore include: the principal, teacher representatives, MoE representatives, faith-based and business representatives, alumni representatives, and most importantly, parent representatives elected by parents of children attending the school. This will ensure maximum involvement of the local community in the school and facilitate national equitability of schooling.

11. Globally-competitive

A report on the world's best education systems (CEOWorld, 2020) surveyed 196,300 educators and other stakeholders in education, who rated education systems in 93 counties on the quality of the public education system and related opportunities. Barbados was ranked 79th out of the 93 counties, while Trinidad and Tobago was ranked 58th, the Bahamas 74th and the Dominican Republic 78th. This indicates the need for education reform in Barbados in order to develop a more globally competitive education system.

The recent OECD report on creating world class education systems suggests that making the necessary changes to bring about effective education reform has been achieved in many countries in the past thirty years with resulting significant improvements in

educational outcomes (Schleicher, 2018). In a report on the Program for International Student Assessment (PISA) conducted in sixty-nine countries, the OECD concluded,

PISA results show that more inclusive and fairer school systems are those that provide access to quality early education for all children, offer additional support to struggling students, rather than require them to repeat grades, and delay the age at which students are selected into different programmes or schools. These systems also strive to have excellent schools located in every neighbourhood and ensure that they are accessible to all students, and provide additional support to disadvantaged schools (2016, p. 46).

Implementation of these components, based on psychological research, within reforms of the education system in Barbados will ensure that education at primary and secondary schools will become more globally competitive.

12. Conclusion

Reforming education systems is a challenging and politically difficult task. Such reforms will take considerable time, effort and resources to implement and there are certain to be teething problems that will need to be worked through. Although some benefits may come quickly, others may not be realized until student populations move into the workforce, where they can make use of their improved education, thereby furthering national economic growth (Schleicher, 2018). Education reforms along the lines of the key values and components discussed in this article would not only create a much more equitable and inclusive education system, enabling the nation to raise overall levels of academic attainment, while reducing student behavioural problems, it would also bring about the substantial long-term economic benefits that are found to result from producing a better educated population.

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