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Note from the Editor

Welcome to the 2015 edition of the *Journal of the International Association of Special Education (JIASE)*.

This is my last edition as the JIASE editor; I was selected as editor of the JIASE in 2009. In my first editorial note, in the 2010 edition, I stated that I felt “honored and privileged to assume the editorship of this journal.” I still feel that way; it has been an honor and indeed a privilege to work with an exceptionally dedicated editorial team and committed authors from around the world. The journal continues to reflect its international focus through both a diverse editorial team and the scope of manuscripts it publishes. I thank members of the International Association of Special Education (IASE) for their commitment to the sustainability of such an outstanding publication.

Because of the increasing volume of the editorial work—a result of a higher submission rate—I was privileged this year to work with Dr. Elizabeth M. Hughes who served as co-editor of this current edition. Dr. Hughes is currently assistant professor of special education at Duquesne University. She is a talented researcher whose research interests include effective instructional approaches, strategies, and assessments for students who are low achievers and/or students with disabilities in reading or mathematics. She is also a member of the IASE. I thank Dr. Hughes for her invaluable contribution to the editorship of this current edition and wish her success in her scholarly and professional endeavors.

I would also like to thank the associate editors, Dr. Greg Prater and Dr. Malgorzata Sekulowicz, for their consistent support and unwavering dedication to the mission of the JIASE. In particular, I feel greatly indebted to Dr. Greg Prater because of the guidance and mentorship that he provided to me during my editorship of the journal. Along with an outstanding group of consulting editors, you all made an excellent editorial team that I am proud to be associated with. Thank you!

Special mention should also go to Dr. Bernadeta Szczupal who has been responsible for translating the JIASE publications into Polish. I thank you for your continued efforts to promote accessibility of the journal beyond English-speaking boundaries.

The Southern Illinois University Printing and Duplicating team also deserve special mention for their outstanding printing job, which they have handled with notable professionalism over the years that I have worked with them. Great job Mr. Rich Bauer and your team!

Finally, I thank members of the Department of Counselling, Psychology and Special Education at Duquesne University for their contribution to the JIASE publication since 2013. In acknowledgement of that support, we have inserted a program flyer (see the final page) for the university’s new Ph.D. program in Special Education, which was launched this year.

Please remember to join us at the 2015 conference in Wroclaw, Poland, where Dr. Greg Prater and I will give a presentation about the JIASE.

I look forward to seeing you in Poland.

Sincerely,

Morgan Chitiyo

The Special Education System in Poland: From Segregation to Inclusion

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Abstract

The changing of the political and economic systems in Poland ushered in changes in the education system, including special education. After many years of segregation and social exclusion of children with disabilities, ideas of autonomy, normalization, and integration initiated the building of a modern system of education of children and youth. Currently this is the most important challenge for the government, education authorities, and especially teachers themselves. This article describes the historical contexts of special education in Poland and the current model of the special education based on specific legal assumptions.

The Polish education system for children with disabilities has been subject to gradual re-casting. The changes were triggered, on the one hand, by the socio-political transformations unfolding in Poland and, on the other, by attitudes toward people with disabilities. So far, the crucial transitions have involved a shift away from the segregation-based model of schooling toward inclusion in the mainstream education system. This shift has been accompanied by a concomitant move from an isolationist to a normalizing model, in which quality education is ensured for all students and policies are launched to promote equal educational opportunities for all, irrespective of the type and severity of disability. With such changes underway, as Głodkowska (2010) writes, education in Poland is increasingly conceptualized as education for all, eschewing exclusion, segregation, and isolation. The tenets underlying the educational model articulated by Głodkowska represent the changes progressing in Poland for many decades. The current model of special education is anchored in the historically-shaped system of education, which has been evolving for nearly one-hundred years. According to Głodkowska, the system of education for children with special educational needs must be underpinned by the ten paradigmatic assumptions illustrated in Figure 1.

A Historical Overview of the Development of the Polish Education System

The process of constructing the education system for children with disabilities is closely intertwined with historical vicissitudes, which deprived Poland of independent statehood under partitions by three neighboring superpowers of Prussia, Austria, and

Russia. Facilities for children with disabilities were established rather chaotically based on immediate local needs. The network of special schools in Poland until 1918 was rare, with most of the facilities for children with mild intellectual disability (called mental retardation at the time) located in the region of Poznań and in Silesia (the Prussian part). In 1896, a school for children with mild intellectual disability was opened in Poznań, and in later years similar schools were set up in Toruń, Owińska, Królewska Huta (present-day Chorzów), Katowice, Bytom, and Szarlej (present-day Piekary). Only three schools for children with intellectual disabilities were established in the Austrian-ruled part of Poland; the schools in Równe and Lviv were founded in 1911 and 1904, respectively. In 1912 Professor Jan Piltz organized the first comprehensive facility for children with “aberrant mental development” in Cracow. In the Congress Kingdom of Poland (the Russian-governed territory), the first school for children with intellectual disability was started in 1904 by Warsaw’s Evangelical-Augsburg commune. It was also in the partition period that first studies on the functioning of children with intellectual disability were launched in Poland, pioneered by the Polskie Towarzystwo Badań Dzieci [Polish Society for the Study of Children], which was founded in 1907 and modelled upon similar institutions set up across Europe (Gasik, 1990). Powerfully boosted by the leading Polish educators Jan Władysław Dawid and Aniela Szygówna, the Society developed rehabilitation programs, which laid the foundation for the later system of special education. During this initial stage all rehabilitation and education forms were geared to the needs of children with intellectual disability. Another important

| | |
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| 1. Equal access to education | All children have equal rights to education. In keeping with this tenet, a child diagnosed with special educational needs must be integrated with the peer environment, provided with education as recommended in the relevant certificate and guaranteed a proper learning setting, specialised equipment, suitable instruction and learning aids. |
| 2. Diversified education | Humanistic approaches in education have induced a shift away from isolation and segregation and fostered a realization that all students must be educated together within an integrative and inclusive model. Consequently, the line between special and general education is gradually being obliterated. Today, a student with special educational needs can attend both a special school as well as a general school in his/her neighborhood. Because students' needs and capacities are diversified, the system of education must be at the same time common for all and diversified for everybody. |
| 3. Education for participation | Conditions must be created to enable all students to participate fully and meaningfully in the school community. 21st-century education entails participation of all students – those with disabilities and those without disabilities – in the school community. A student's disability may pose a challenge to any school as, besides teaching, the school must also provide therapy and revalidation as well as work toward forming proper relationships in the peer group. |
| 4. Diagnostic education | To be effective, education of any student must be grounded on apt identification of his/her general and educational development. Such a diagnosis should capture the student's capacities and limitations and anticipate the possible effects of progressing developmental problems in order to prevent secondary developmental disorders, especially those of emotional and motivational nature. |
| 5. Education for subjectivity | The shareholders and actors in the education process are a student with special educational needs, his/her parents/legal guardians, teachers, other professionals, peers and the local community. Diversified education (with equal access to special, integrated and general schools) should create favorable conditions for the functioning of each subject involved in this process. |
| 6. Education in the space “for all and everyone” | Constructing an educational space around a student with special educational needs is a painstaking process of overcoming prejudice and entrenched mental schemata. It is urgent to build educational settings, which are relevant to all participants in the educational process. |
| 7. Harmonized education | Education is effective if conditions are created for harmonizing all elements of the educational process. The teacher participates in the development of a child with disability by setting directions, creating conditions and assessing outcomes. However, his/her most important function is harmonizing, i.e., securing a balance between what the child may achieve (avoiding the extremes of either undue ease or excessive difficulty) and what cannot be realistically attained and may even be redundant. The teacher makes sure that the external learning conditions (other students, the environment, instruction strategies) are in tune with the internal ones (capacities, talents, motivations, emotions) |
| 8. Professional education | Teaching and education of students with special educational needs must be entrusted to professionally trained specialists. The complexities of integrated/inclusive education require professional training which prepares the prospective teachers for facing up to the challenges inherent in working with students with special educational needs in the integrated/general school setting. Vocational education must give special educators ample skills in organizing and coordinating the education process of students with disabilities in a general school. |
| 9. Liberating education | Education must conform to the current representation of a person with disability, which emphasises chances of self-emancipation from constraints and accomplishment of such crucial goals as dignity, autonomy, self-constitution, identity, subjectivity and well-being. |
| 10. Education informed by educational optimism | A special educator's effort must crucially be informed by hope that even a student with the most severe disability can make progress. The teacher cannot focus only on students' disability or deficiency but must be, instead, guided by their constantly revealed assets and developmental resources. This involves both a faith that the apparently unattainable can indeed be attained and a hope that it will come true. |

Figure 1. Pragmatic Assumptions of the System of Education for Children with Special Education Needs

figure in the early period of constructing the Polish special education system was Józefa Joteyko (Balcerek, 1990) who contributed both conceptually and organizationally. It was Joteyko who conducted in-depth research into the development of children with “defective” or “disturbed” functioning, diagnosing and qualifying their needs. She also campaigned for creating special classes within mass schools and did pioneering work in training teachers for special schooling (Balcerek, 1990).

Upon regaining independence in 1918, nationwide policies were launched to rebuild the system of education, including education of children with intellectual disabilities. The decree of 1919 (Balcerek, 1990) made seven-year education mandatory for all children, including children with intellectual disabilities. The Constitution of 1921 was fundamental for the Polish education system in that it stipulated free education in public schools for all children. This provision proved a breakthrough for the system of special education to be developed in the following years. Zarębska (2008) states:

That a special education framework was urgently needed in Poland in the aftermath of regained independence was aptly captured by J. Hellmann in an article in *Szkola Specjalna* [Special School]. According to him, there were about 75,000 school-aged mentally retarded children in Poland at that time, whereof only 2,000 attended schools or were placed in special facilities (J. Hellmann 1924/1925). Hellman’s analysis of the field was a prelude to designing a special education programme which envisaged building 22 facilities (institutes) for 4,300 mentally retarded children and establishing of 1,872 so-called auxiliary special classes for 36,540 educationally delayed or neglected students. (p.150)

The pioneering advocates of the special education system had, predominantly, two crucial issues on their mind. One was designing and developing instruction and education methodologies for the emerging network of schools while the other was providing professional training for special education teachers. The idea was championed by the most prominent advocate in Polish special education at the time, professor Maria Grzegorzewska. Her resolve and engagement culminated in 1922 when Państwowy Instytut Pedagogiki Specjalnej (National Institute of Special Education), renamed as Akademia Pedagogiki Specjalnej (Academy of Special Education), became the most important university that trained special

educators and participated in international research on disability. The institution has continually played a leading role in the development of special pedagogy and education in Poland (Sękowska, 1985). Extremely determined and dedicated to children with developmental disabilities, Maria Grzegorzewska and her team devised novel approaches to be implemented in special education facilities, including original methods of diagnosing disability as well as unique methods and forms of education and instruction for children with developmental disabilities. In her own words, Grzegorzewska aimed to “educate children so that they could perceive, observe, study, and understand natural and social phenomena,” (Dziedzic, 1970, p.16). The main purpose of her method was stimulating the development of multiple skills and attitudes in children, including responsibility, reliability, conscientiousness, mutual help, solidarity, perseverance, accuracy, prudence, teamwork, anticipation, and planning. She wanted to promote children’s joy and enthusiasm for work and learning, as well as foster their positive attitudes to other people.

Grzegorzewska and her team combined a practical approach with theoretical pursuits, and their work was a cornerstone of scholarly analysis of disability. According to Zarębska:

The development of special education was greatly furthered by Sekcja Szkolnictwa Specjalnego [Special Schooling Section] founded on 1 June, 1924, and headed by M. Grzegorzewska. Another event that importantly contributed to disseminating the idea of schooling and education for retarded children was the launching, in the same year (1924), of *Szkola Specjalna*, a quarterly entirely devoted to instruction and education for abnormal people. M. Grzegorzewska was its Editor-in-Chief. The periodical embarked upon an ambitious publication project, including scholarly submissions, information and reports, which has been implemented with impressive consistency due to the board’s and authors’ perseverance and outstanding aspirations. As such, it has developed into a still valued guide for special education teachers. The issues of special education were addressed again in 1925 at the Zjazd Nauczycieli Szkół Specjalnych [Assembly of Special Education Teachers], which formulated the basic postulates for such fundamental ventures as: 1) developing a bill on special education, 2) devising a project of expansion of special schools and facilities. (Zarębska, 2008, p. 151)

Unfortunately, the special education system developed in the early twentieth century failed to meet all social needs of care, education, and schooling for children with special needs. Estimates indicate that only 12% of all children with intellectual disabilities had access to special education (Balcerek, 1990). However, even though the pre-war special education system in Poland did not include all the children who needed special education, the achievements of its founders fundamentally affected the building of post-war special education. In fact, authors of this system have also been relevant to the current system of training, education, and care for children with special educational needs.

After World War II, communist policies threatened the success of special education. It was not until the 1960's that the efforts and determination of special education advocates resulted in the rebuilding of the special education system. Despite reform, education for individuals with intellectual disabilities was still inadequate.

As Zarebska (2008) highlighted, the Polish People's Republic provided substandard vocational training for young people with intellectual disabilities. Lack of uniform standards adversely impacted the level of professional education that students received. For many years, special vocational schools prepared students to work in vanishing professions, or professions that were low-paying and less attractive. Additionally, schools functioned with limited resources, obsolete equipment and machinery, no textbooks, and limited vocational guidance. Fortunately, reforms to the special education system resulted in changes to vocational training for students with intellectual disabilities. Professional standards were developed to ensure the quality of vocational training and evidence of professional qualifications for vocational professions.

The current educational system recognizes the importance of vocational training in rehabilitation of students with intellectual disabilities. To ensure the quality of vocational training, there are now a defined set of standards and examination requirements that are used as evidence to demonstrate that graduates meet professional standards and can be successful in the field of their profession (Dziennik Ustaw, 2003).

Another important development was setting up a grid of special nursery schools, in an attempt to mainstream children with disabilities at the earliest educational stage. The political and economic shift of 1989 precipitated reforms in education of children with special educational needs. Parents proved to be a powerful influence in this process by founding many nongovernmental organizations, which actively

promote mass education of children with disabilities. However, until 1997, the system of education did not include children with severe disabilities. The system of special education in Poland, with constant changes unfolding in its structures and modes of operation, finds itself in an on-going evolution process initiated by the general education reform.

The Current Education System for Children with Special Educational Needs in Poland

The major education reform launched in 1999 covered the whole education system. The changes it introduced were intertwined with the political and economic shift and aimed to adjust the education system to the demands of the 21st century. Recapitulating the major tenets of the Ministry of National Education, Leśniak (2008) claimed that:

The most important point of the coming education reform is a curriculum reform which aims to do away with the "CPF rule" (cram, pass, and forget). It will be made possible by new core curricula, in which encyclopaedic knowledge will give ground to logical interconnections among fields and applicability of school-acquired knowledge in everyday life. It will also be made possible by new instruction modes. For the first three years, education will be integrated, i.e. not divided into particular subjects, and only later will separate subjects be taught, some of them combined into thematic modules – humanistic and natural-scientific ones. The new organisation of classroom instruction will go hand in hand with changes in the teacher-students relationship. The teachers, with fewer students in the classroom and a considerable freedom in how to teach, will be able to devote more time and energy to each student individually. They will also be able to focus more on issues of particular interest to the class, instead of "chasing the curriculum," which has been the case so far. The new core curricula include one more novelty, so-called educational content. This appears both in description of particular subjects and in separate educational paths, such as education for family life or education for patriotism and citizenship. (p. 2)

These tenets underlying the transformations of the Polish education system also pertained to special education. It must be remembered that the initial Act

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| Compulsory education (5-16 years of age) consists of: | | Upper secondary schools are divided into: | |
| One year of compulsory pre-school education | | Basic vocational schools | 2-3 years of education, ending with an exam and offering a certificate of vocational qualifications |
| Six years of primary education | | Comprehensive or specialised secondary schools | 3 years of education, ending with a matriculation exam, which is mandatory for enrolment in a university |
| Three years of lower secondary education | After which the student can continue studies in an upper secondary school | Technical secondary schools | 4 years of education, ending with a vocational exam certifying vocational qualifications and offering a possibility of matriculation exam |
| | | Supplementary comprehensive or technical secondary schools | 2-3 years of education, respectively, offering the matriculation exam |
| | | Post-secondary schools | Up to 2.5 years of education, offering a certification of vocational qualifications |
| | | Three-year special schools | For students with moderate or severe mental disabilities and multiple disabilities, offering an occupational training certificate |

Figure 2. The Division of Schools Because of the Student's Age and Type of Education

on Education was passed in 1991, and all further provisions were amendments to that Act.

In describing the special education model, it must be considered that the basic principle behind the Polish education system is mass education. This means that under the heading of compulsory education, the system strives to include all children and youth below 18 years of age, within full-time, part-time, school-based, and extramural schemes, irrespective of the kind and severity of disability. It was not until 1996 that schooling became mandatory for children with profound intellectual disabilities and was provided in revalidating and education activities. See Figure 2 for information about school sequence. In this context, the education system recognizes individual needs and capacities of children and youth, which makes it possible to offer education adequate to everybody's educational needs.

As stipulated by the Act on Education of September 7, 1991 and the ordinance of the minister responsible for schooling and education, special education is an integral part of the education system. The schooling system includes students with special educational needs, starting from nursery schools and other pre-school facilities to elementary schools, lower secondary schools, upper secondary schools, and three-year special schools providing occupational training. The term "student with special educational

needs" designates both children who have been diagnosed as needing special education as well as those who are challenged by standard curriculum requirements because of their specific cognitive and perceptual condition (e.g., lower than average intellectual skills, dyslexia, dysgraphia, dysorthographia, dyscalculia), health status (e.g., children with chronic illness) and those considered at-risk (e.g., immigrant children, children from educationally dysfunctional families) (How to organize the education of pupils with special educational needs - a guide, 2010).

The Polish system of special education clearly distinguishes between students with a disability and students whose disability impacts their education, with the latter being referred to as children with special education needs (Firkowska-Mankiewicz & Szumski, 2008). Certificates of special educational needs are issued for children and youth with disabilities who require a special organization and method of learning; they cover a school year, an educational stage or a period of education in a given school. The criteria and procedures of issuing such certificates are regulated by the ordinance of the Minister of National Education, Ordinance of the Minister of National Education of 12 February 2001 on issuing certificates of special educational needs or individualized teaching for children and youth as well as recommendations of

early support for children's development and principles of ascription to special education or individualized teaching (Dziennik Ustaw, 2001). Based on the ordinance, the certificates are issued by specialist committees appointed at public psychological and educational support centers. The procedure of issuing the certificate is initiated by the parents or legal guardians, and granted by the opinion-giving committee. It begins with an application process and parent-issued consent for exams or related tests. The opinion-giving committee consist of the chairperson (i.e., the centre's director or his/her designee), a psychologist, an educator, a medical doctor, and other professionals whose expertise is necessary to issue a specialist diagnosis. The certificates are issued based on the tests administered at the center and other documentation provided by the parents or legal guardians, usually including reports from observations and psychological, educational, and medical tests. After consulting with the child's teachers, the committee decides whether he or she needs special education and drafts recommendations as to its forms and methods, which include recommendations of psychological, educational interventions adjusted to the diagnosed type and severity of disability, and the type of school the child should attend (Firkowska-Mankiewicz & Szumski, 2008). At the request of the parents or legal guardians of the child whose special educational needs have been assessed in such a procedure, the local self-government authority is responsible for the child's place of residence, therefore mandatory tasks include management of nursery schools and schools which provide the child with the type of education defined in the certificate of special educational needs. The parents or legal guardians file in the request together with the certificate.

Organizational Forms of Schooling

In Poland, there are five basic organizational forms of schooling for students with certificates of special educational needs. Two of the schools are segregatory. Three schools are non-segregatory and more inclusive.

Segregatory Forms. The two segregatory forms include special schools and special classrooms in mass schools (with special schools prevailing). In 2013, the most recent data published by Główny Urząd Statystyczny (Central Statistical Office) indicated there were 781 special elementary schools, 840 special lower secondary schools, 1,030 upper secondary schools, 379 special basic vocational schools, and 461 three-year special schools providing occupational training for students with moderate or severe

intellectual disabilities and students with more than one disability in 2012-2013. These schools prepared youths for many various social roles, which are adjusted to their developmental capacities, and active adult lives. Educational goals for these students include consolidation and broadening of their knowledge, development of social skills, and adaptability and acquisition of new skills for independent life. In this case, education involves simultaneously and holistically four functions: the didactic, educational, caring, and preventive ones while their scope is adjusted to the students' educational needs and psycho-physical capacities. Education includes general education, expanding the knowledge the students possess, formation of proper attitudes to work, and preparation for working in particular positions in the open or protected labor market (Główny Urząd Statystyczny, 2013).

Non-Segregatory Forms. The non-segregatory forms include mainstream (mass) classrooms, integrated classrooms, and integrated schools. It should be emphasized that the Polish education system encourage general-access education and integrated education, in which students with diagnosed disabilities may attend classrooms of 15 to 20 students without disabilities and three to five students with disabilities. Integrated schools and general schools with integrated classrooms employ additional teaching staff with special education training and revalidation professionals. In some cases, the schools may also employ teaching assistants (Dziennik Ustaw, no2, 1999, p. 20). The first of the forms is sometimes called individual integration and consists of students with disabilities attending regular classrooms at their local schools. It does not mean, however, that such students have no access to specialist pedagogical assistance, as the school's curriculum must include revalidation activities adjusted to the type and severity of the students' disabilities. This is regulated by another ministerial ordinance: Ordinance of the Minister of National Education and Schooling on the organization of schooling, education and care for disabled and/or socially maladjusted children and youth in general and integrated nursery schools, schools, and classrooms (Dziennik Ustaw, 1999; Firkowska-Mankiewicz & Szumski, 2008).

Children with disabilities aged three to six are included in pre-school education, but when they turn six years old they have a right to join the first grade of elementary school. Pre-school education can be extended up to the age of ten if the child has a relevant certificate from a public psychological and educational support center. Schooling becomes mandatory with the beginning of the school year in the calendar year when

| | |
|---|---|
| Child's personal information | Name, surname, date of birth, the name of the nursery school/school/facility, the educational stage, group/grade, reasons for administering special education (the assessment issued by a public psychological and educational support centre) and the school year. |
| Diagnosis and certificate of special educational needs | |
| Analysed findings of specialist multi-faceted assessment of the student's functioning, therein | The student's features conducive to development – strong sides to rely on; educational and therapeutic characteristics, e.g., skills, scope of knowledge, positive elements of the value system, consolidated positive personal qualities; information on the student's difficulties (primary and secondary effects of disability); information on the reasons for difficulties not included in the certificate; information on how the child functions in the peer group at the nursery school or school |
| The scope of the teachers', form teachers' and professionals' integrated interventions, therein | Therapeutic objectives resulting from the specialist multi-faceted assessment of the child's functioning; a set of recommendations for eliminating developmental and educational difficulties (primary and secondary effects of disability relevant to educational and therapeutic objectives); ways of preventing secondary effects of disability |
| The scope of adaptation of educational requirements, therein | Educational goals included in the curriculum (instead of rewriting them, the curriculum which defines them should be identified); the scope of adaptation of the curriculum/curricula based on the analysis of expected outcomes included in the curriculum; adaptation of testing and evaluation methods |
| Procedures for goal achievement | Identification of methods, forms and means of instruction (and possible specialised teaching aids) in which the student's strong sides are relied on for achieving educational and therapeutic objectives |
| The list of additional activities (information on the type of specialised, revalidating and other activities) with their outlines | |
| The scope of parental collaboration | |
| The way of evaluating the program | Effectiveness assessment of the implemented priority measures |
| Information on modifications to the IPET based on the specialist multi-faceted assessment of the student's functioning | Date, section, type of modification, signature of the person who made the modification, information on the consent of parents/legal guardians |
| Information on the IPET being authorized by the team | Date and signature of the person who drafted the program, the head's approval, signature of the parent/legal guardian, and, possibly, a note about the parents/legal guardians being informed |

Figure 3. Components That Should be found in each IPET

the child turns six years of age, with the understanding that if the child is not ready, school-entry may be delayed one year. Education is compulsory until the child completes lower secondary school, but ceases to be so when the child turns 18. Students with disabilities may continue their studies at special elementary school until 21 years of age and attend secondary school until they complete it or turn 24 years. Revalidating and education activities are recognized as an authorized form of compulsory education.

In the mainstream schools, the term general (i.e., general-access, mainstream, or mass) school designates a school attended by students without certificates of special educational needs, (i.e. students whose physical, emotional and social functioning

complies with the norm) attended by children with diagnosed special educational needs, special teams are appointed to take care of their education, including teachers, educators, psychologists, and other professionals. It is the teams' responsibility to plan and coordinate educational and psychological assistance organized and provided by a nursery school, a regular school or another facility the students attends. The activities of the team or teams are coordinated by a person appointed by the head of the nursery school, regular school, or facility. The coordinator organizes team meetings depending on particular needs, designs psychological and educational assistance for the child, and assesses its effectiveness. Form teachers and professionals on the team analyze the student's level of knowledge, skills, and functioning and try to

anticipate related challenges and difficulties in order to design an individual therapeutic and educational path for the student. The team drafts and updates the Karta Indywidualnych Potrzeb Ucznia [Card of the Individual Student's Needs].

The Card includes information as to the student's assessment performed by the public psychological and educational support centre, recommendations of individualized teaching or of individualized compulsory pre-school preparatory year, or, alternatively, a diagnosis of the student's need of psychological and educational assistance. The Card also describes the scope of psychological and educational assistance. The forms, methods, and duration of assistance recommended by the team also shows the regular assessments of effectiveness of the interventions implemented and schedule of the team meetings. The idea behind the Card is to compile all available information about the child and use it to optimize the teachers', didactic, educational, and caring interventions. It is a valuable source of information for the parents, teachers, and other professionals, which is of particular importance when the child relocates to another nursery school, regular school, or facility as it enables the institution to launch immediate intervention in continuation of the previously provided assistance (Wojdyła, 2010). The Card also lists the details of the child's Indywidualny Program Edukacyjno Terapeutyczny (Individual Programme of Education and Therapy, IPET), whose basic point is to align a school's primary functions of instruction and education with the therapeutic function, which is an important element of intervention aimed to rectify or compensate for the developmental deficiencies of children with disabilities. As the educational and therapeutic functions cannot be dissociated from each other, the IPET is supposed to specify where and how education and therapy should overlap and intersect (Trochimiak, 2010).

There is not a single template for all IPETs. They are diversified depending on the type of disability and severity of social maladjustment and/or the educational stage and curriculum requirements related to it. See Figure 3 for a description of the components of the IPET.

As the objective of each intervention launched by an educational facility is for the child's good, close collaboration between school and parents is a prerequisite to effective and comprehensive educational and therapeutic care for the child. In 2012-2013, 2,400 students in general schools had certificates of special educational needs, whereof 6.6% attended special classrooms, 16.6% integrated classrooms, and

76.8% general-access classrooms (Oświata i wychowanie w roku szkolnym, 2012-2013).

General and integrated nursery schools and schools, as well as facilities with integrated classrooms, are under legal obligation to make sure that:

- the recommendations included in the special educational need certificate are fully implemented; proper learning settings, specialized equipment and teaching aids are provided in keeping with the students' individual educational and developmental needs and psycho-physical capacities;
- speech therapy, corrective and compensatory exercises and other therapeutic interventions are provided;
- other activities adjusted to the students' individual developmental and educational needs and psycho-physical capacities, in particular revalidating activities, are organized;
- students are prepared for independent adult life (Kuczyńska, 2014, p.1).

Based on certificates and recommendations, special education for children with mild, moderate, and severe intellectual disabilities are organized and provided based on the following procedures:

- students with mild intellectual disabilities learn based on the general core curriculum for all students of mass schools, but the curriculum is adjusted to their capacities as stipulated by the certificates and recommendations of the public psychological and educational support centre;
- students with moderate to severe intellectual disabilities learn based on a separate core curriculum. Each student has an individual educational program designed for him or her by the teacher in collaboration with a psychologist and in conformity with the certificate and the recommendations;
- students with profound intellectual disability are involved in compulsory education based on revalidating and education activities (until the age of 25), which can be arranged as individual or group workshops. The activities aim to support the children's and youth's development, stimulate their interest in the world around and help them become independent of other people on daily basis.

Students with disabilities can be helped by individual instruction, which fosters their development. Individualized teaching is a form of education intended for students suffering from serious, chronic diseases, severe trauma and/or effects of accidents, surgeries, etc. In 2012-2013, individualized teaching was provided for more than 9,000 students with special educational needs (Główny Urząd Statystyczny, 2013).

Currently, education and rehabilitation of students with disabilities are provided based on the 2010 ordinance of the Minister of National Education (with later amendments) (Dziennik Ustaw, 2010). Certificates of special educational needs are issued only for children with the following disorders:

- Deafness or hearing impairment
- Blindness or vision impairment
- Mild intellectual disability
- Moderate to severe intellectual disability
- Profound intellectual disability (for revalidating and education activities)
- Multiple disabilities
- Autism (and Asperger syndrome)
- Motor disability (therein aphasia)
- Socially maladapted children and children at risk of social maladjustment.

The managing authority of the school (in most cases – the commune) is obliged to create a suitable learning setting for each child diagnosed with special educational needs. The same authority must make sure that the students are taught by adequately-qualified teaching staff prepared to apply suitable educational and therapeutic methods adjusted to such needs and particular disabilities. The staff must include such professionals as a psychologist, a speech therapist, and a special educator. Additionally, the school must be furnished with specialized equipment as necessitated by the child's needs. The managing authority must also arrange for transporting the children to the educational facility and back home.

The legislation on special educational needs has ramifications as well. Specifically, it has limited the options for children. For example, children who have mental disorders or chronic diseases are often overlooked as in need of interventions. Such children, according to the law, have no right to special education. It poses a serious educational problem, which should be solved by amending the law as soon as possible. The group of children whose special educational needs are recognized does not include children with diagnosed chromosomal or gene disorders. Often the symptoms associated with

particular disorders may affect the child's intellectual functioning classified as an intellectual disability. Such children form another category that requires special assistance (e.g., because of their somatic otherness or emotional volatility) but is not located in the legal system, grievously, ignored by the legal system. Clearly, special education in Poland is still a "leaky vessel." This metaphor should make us think of a multiplicity of children who need special care, rehabilitation, and carefully selected instruction methods but, unfortunately, "fall out" from the system.

Conclusion

As the idea of autonomy and normalization of lives of people with disabilities spread, integrated education developed, the public consciousness grew and the notion of inclusion (individual integration), gained wider currency. In the Polish system of education, educational inclusion is, in fact, still undefined. Educational inclusion is most frequently understood in terms of individual integration within the general (mass) system. All of these developments have furthered full and meaningful participation of people with disabilities in the contemporary education system. As shown in this article, the system of special education in Poland has undergone profound changes since the foundation of first special schools, which has undoubtedly fostered a new social image of disability. The discussion and examples in this article make it obvious; however, that special education in Poland urgently needs further development. It is our challenge and task for the years to come to make the idea of inclusion go all the way from a noble intention to an educational reality.

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Teaching in Residential Schools for the Deaf in Zimbabwe: Professional and Vocational Perspectives

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Abstract

This paper discusses how vocational and professional perspectives of teaching deaf learners may influence teaching and learning in residential special schools for the Deaf in Zimbabwe. We argue in this paper that it is the hearing pedagogues' responsibility and obligation to reflect on how their vocational and professional dispositions may have a bearing on teaching practice and learning outcomes. We believe that an understanding of the influence of these dispositions on personal practice is essential if Deaf education is to move forward in these schools that were established as asylums within a charitable colonial ethos.

Introduction

Deaf children's educational outcomes are a long-term, global challenge and there is no shortage of research studies about the significant discrepancies in academic functioning between deaf and hearing students. Wood, Wood, Griffiths, and Howarth (1996), Brueggemann (2004), and Wauters, van Bon and Tellings (2006) record how most deaf high school leavers barely manage to achieve a fourth grade reading level. Delays of up to three years have also been recorded for mathematics scores for Deaf learners compared to hearing learners (Bull, Marschark & Blatto-Vallee, 2005; Gregory, 1998; Nunes & Morena, 1998, 2002; Zarfaty, Nunes & Bryant, 2004).

The concerns with the low academic outcomes of deaf learners are duplicated in Southern Africa where they appear to be caused by a number of factors, starting with teachers' low expectations of what deaf learners can accomplish (Moore & Martin, 2006; Störbeck, Magongwa, & Parkin, 2009). Parkin (2010) concurs and argues that although d/Deaf learners are fully capable of achieving the same educational outcomes as those of hearing learners this will not be achieved in atmospheres of low expectations where they are perceived by the system as not being able to do so.

The underachievement of deaf learners occurs in an environment where there are contestations about whether teaching deaf learners is a vocation or a profession. Some teachers of deaf learners see their work as a vocation while others see it as a profession and it is the balance between profession and vocation and their associated outcomes for the deaf learners that

are of interest to us in this paper. The paper focuses specifically on Zimbabwe, a country that has been called "one of the most disability-accessible in Africa" (Devlieger, 1998, p. 26) but where the language of choice within the Deaf community is Zimbabwean Sign Language (ZSL) (Barcham, 1998) while the language of instruction is mostly English in all three of the residential schools for the Deaf (Chiswanda, 2001). A little background information is offered to illuminate these three schools and the Zimbabwean context within which this discussion takes place.

Context

Henry Murray School in Masvingo and Emerald Hill School in Harare were the first two schools for the Deaf in Zimbabwe and were established simultaneously in 1947. These were founded by the Dutch Reformed Church and the Dominican (Catholic) Sisters respectively. The third school, Jairos Jiri Naran School was established in 1968 in the city of Gweru by the Jairos Jiri Association for the Rehabilitation of the Disabled (Peresuh & Barcham, 1998). From the beginning, curricula focus in these three schools tended to be on basic literacy, numeracy, speaking skills and various crafts. Chitiyo and Wheeler (2004) say that training in crafts such as basketry, woodwork, leatherwork, sewing, and cookery in these schools for the Deaf in Zimbabwe has been done more as a moral and religious obligation than a right for the children to receive an education. Despite this, Kiyaga and Moore (2009) explain that the majority of special schools in sub-Saharan Africa have followed the example of schools for the deaf in Britain and France which were strictly oral-aural, meaning that they focused largely

on listening and speaking skills for deaf learners. In colonial Zimbabwe teachers of the deaf were trained outside the country in institutions that subscribed to particular communication methods such as oralism or total communication (Barcham, 1998). This was in an age of teaching that Hargreaves (2000) calls pre-professional in which learning to teach for new teachers was largely seen as a matter of apprenticing oneself as a novice to someone who was skilled and experienced in the craft.

In the current post independence era, there is still no national policy to guide special schools for the Deaf on teaching approaches and Chimedza (2001) attributes this absence of policy to the government's on-going search for information on which to base such a policy. In the absence of a specific policy for them, Henry Murray, Emerald Hill, and Jairos Jiri Naran schools for the Deaf, interpret in various ways the government's ordinary schools' policy on language of instruction. Government policy is that a child's first language be used to learn another language in the first three years of education (Education Act, 2006). Teachers in these special schools for deaf learners are all hearing people who invariably choose their own spoken language or English as the language of instruction. There is a dearth of mutually agreed upon standards for teachers of learners who are deaf or hard of hearing in Southern Africa and especially in Zimbabwe. Many permanent teachers of the deaf in Zimbabwe have general teacher education degrees while some temporary relief teachers have nothing more than a high school certificate. Very few teachers have specialized beyond their initial teaching degree by doing additional training at diploma or bachelors' degree with one or two 'hearing impairment' modules. Nziramasanga (1999) found that even these specialist teachers for the deaf had to be taught ZSL by their pupils before they could teach them. In the absence of these specialists in hearing impairment, those who specialized in teaching learners with visual impairment or with intellectual disability are also considered as specialists in the schools for the Deaf. Most colleges and universities train teachers in generic programs called special needs education and these offer exposure to the various areas of special needs to in-service teachers (Mpfungu, 2001) and sometimes pre-service teachers. The latter is contrary to what Mavundukure and Themani (2000) advocate about specialization when they say that the starting point of any specialization in teaching must be the initial training which becomes a platform from which other training and professional practice is built. This situation in Zimbabwe contrasts requirements in the developed world such as in the US where Easterbrooks

(2008) outlines standards of knowledge and skills required of teachers in deaf education. A common requirement for teachers of the Deaf in the developed world is fluency in the mode of communication in which they will teach, for example fluency in American Sign Language (ASL) or specific training in the aural-oral method of communication.

Statement of the Problem

The uncertainties in Deaf education in Zimbabwe appear to be inextricably linked to perceptions of whether teaching learners who are deaf should continue to be the charitable vocation that it was when the missionaries established the special schools or whether it should shift to a professional discourse. If it is to shift to a professional discourse, an in-depth understanding of d/Deaf pedagogy which weighs the strengths and limitations of the clinical and socio-cultural approaches is necessary. If on the other hand, the teaching of learners who are deaf is to remain a vocation, the benefits and limitations of a secular or religious interpretation of vocation need to be weighed. Our aim in this paper is to foreground these perceptions of what it means to teach learners who are deaf as we believe that they may have a bearing on the challenges and opportunities in current practice. In order to understand hearing teachers' commitment to teaching as either a vocation or a profession with all the possible ramifications, we first analyze in the next sections what a vocation and a profession are. We then proceed to use this understanding to try to show what it would mean to teach deaf children as a vocation and then as a profession.

Teaching as a Vocation

Traditionally, teaching as a 'vocation' has been presented in religious or devotional terms positing direct divine intervention which make scientific interpretation impossible (Flanagan, 2003). Since Henry Murray and Emerald Hill schools were established by religious missionaries, teaching as a religious vocation prevails overtly at least in these two schools. Kabzems and Chimedza (2002) argue that the missionary societies traded on their charitable service, that is, services to individuals were provided in exchange for adopting Christianity. Similarly teachers in these schools would also be expected to be Christians devoted to providing a charitable service to deaf children who are less fortunate than them. Another religion which may have an influence on teaching deaf learners is related to Zimbabwean indigenous-traditions. Most teachers of deaf children

in Zimbabwe nowadays come from indigenous-traditionalist culture, in which children with disabilities are considered as unnaturally conceived, bewitched, and therefore neither fully human nor part of the community (Chimedza, 2008). Kiyaga and Moores (2009) also state that many traditional beliefs in Africa characterize deafness as a manifestation of a mysterious fate or God's will, with some pitying them and others seeing them as burdens that lack the ability to be independent. Teaching as a religious vocation can be explained using Flanagan's (2003) internal vocation theory and attraction theory. Both posit direct divine intervention in the sense of a private divine call, a call in the form of a special grace or a strong and permanent supernatural attraction. This would generally mean that teaching was commissioned by and continues to be guided by a divine being for the ultimate benefit of the learners. The conceptualization of vocation as a divine postulate would appear to result in very strong commitment to teaching. However, it also emphasizes compliance with the perceived will of a divine being within an unchanging and unchangeable social order. Another limitation of this kind of vocation of teaching is that it does not appear to be amenable to scientific scrutiny as it may be couched in supernatural terms which cannot be verified. A secular interpretation of vocation would appear to make up for these shortcomings. In a secular interpretation of teaching as a vocation emphasis would be on having the correct mental, physical and moral attributes as well as having the right intentions (Flanagan, 2003) of making a difference. In this interpretation vocation is an ongoing process which requires the freedom to approach the world as changing and changeable. Since teaching always reflects some form of intellectual, cultural, and social imposition based on a particular ideological perspective (Flanagan, 2003) it is important to overtly articulate the ideology so that there is transparency.

Teaching as a Profession

There are several different perspectives about what teaching is and these may have a bearing on how teachers of deaf children experience teaching. Rowan (1994) posits that teaching is a form of professional work requiring a great deal of professional knowledge; Apple (1996) argues that it is a form of labor; Huberman (1993) states that it is a type of craft work and Eisner (2002) proposes that it is a type of artistic endeavor. In this paper we take the view that teaching children is professional work requiring not only specialized professional knowledge but also intuition for successful performance as a teacher. Using

Hargreaves' (2000) characterization of professional teaching into four ages, we now trace the development of teaching of deaf children into the pre-professional age, the age of the autonomous professional, the age of the collegial professional and the post-professional. Teachers of the Deaf in each of these ages would have different experiences of teaching.

In the pre-professional age, untrained teachers learned how to teach deaf learners through practical apprenticeship with more experienced teachers. Hargreaves (2000) states that in this age teachers were virtually amateurs who only needed to carry out the directives of their more knowledgeable superiors. This age persists in the post-colonial period especially with respect to temporary untrained teachers who replace trained teachers who go on leave as well as teachers with a mainstream teacher education who are deployed to special schools for the Deaf. In the second age, that is, the age of the autonomous professional, Hargreaves (2000) explains that teachers could choose the methods that they thought best for their own students but that pedagogical choice was polarized and permissive. Barcham (1998) observed that a key area of conflict in the education of deaf children is on the methods of communication.

In an age of teaching that Hargreaves (2000) calls the collegial professional age, there are increasing efforts to build strong professional cultures of collaboration to cope with uncertainty and complexity in the workplace. In this age, teachers of learners who are deaf would be expected to engage in ongoing professional learning in order to respond effectively to rapid changes in society. In the age of the postmodern professional, Hargreaves (2000) predicts that teacher professionalism will be argued about and pulled in different directions with the result that professionalism will be broader, more flexible and democratically inclusive of groups outside teaching. Collaboration would not be restricted to fellow teachers of the deaf as was the case in the preceding age, but might be expected to extend to allied professionals and organizations of the deaf.

Hargreaves (2000) states that the age of the postmodern professional will come about through commitment of teachers and others as the free-market economic forces ranged against education are considerable. In an age where there is the marketization of education, a profusion of claims and counter-claims about what and how to teach prevails. Teachers have to deal with market-inspired systems of administration from the corporate sector such as performance management through targets, standards, and paper trails of monitoring and accountability. Such micro-management of teachers is identified by

Hargreaves (2000) to be the antithesis of post-modern professionalism.

Implications for Teaching d/Deaf Learners

The teaching of learners who are deaf that is conceptualized in religious or devotional vocational terms has the major benefit of a strong commitment to duty. Religiously-inclined perceptions of teaching deaf learners as a vocation do therefore seem to have a legitimate place especially in a general population which is religious. Christianity was the foundation upon which the early schools for the deaf were founded in Zimbabwe and so would clearly continue to have a role in shaping the direction of deaf education. Traditional negative perceptions of disability are sometimes based on a fear of the mystic and so can be addressed by either Christian principles or other local traditional beliefs and views which are positive. Devlieger (1998) showed how, when referring to people with disabilities, so many African languages use prefixes for object or animal referents such as '*chi / isi*' meaning 'it'. For example the term for a disability in Shona, *chirema*, implies being a burden and having 'thing-like' qualities, which is negative. However local proverbs such as *Seka hurema wafa* (Laugh at disability when you are dead) issue a strong warning against being negative and despising people with disability as there is the possibility this could happen to anyone at any time. A fear of divine retribution can therefore be quite useful in ensuring deaf learners are not mistreated. The common point for both Christian and Zimbabwean indigenous-traditional religions would appear to be that teaching as a vocation is a work of charity. This approach tries to make up for the deaf learners' deficits so that they become acceptable in society. Charitable service provision from this perspective might mean trying to change the perception that people with disabilities are not adequate.

It is not difficult to see how religious vocation leads to charity within a deficit perspective of deafness. The deficit perspective studies the impact of deafness within the purview of mainstream theories and research on children without disabilities (Paul, 2001). This means that deaf children are described relative to the characteristics of or goals for typically hearing children in mainstream society in order to remedy the deficiencies or improve the skills of deaf children. Teachers informed by this perspective would typically approach the learning of children who are deaf as a problem in literacy (for example Karchmer & Mitchell, 2003; Wauters, van Bon & Tellings, 2006) or a problem in numeracy (for example Bull, Marschark

& Blatto-Vallee, 2005; Nunes & Morena, 2002). Because most deaf children are born into all-hearing, speaking families (Chimedza & Mutasa, 2003; Quigley & Paul, 1994) the language of the home is usually inaccessible to them and so it is often the case that they have not developed a sophisticated competence in any language by the time they start school (Musengi & Dakwa, 2011). Marschark and Wauters (2008) show that upon entering school they are already well behind their hearing age-mates in the acquisition of the knowledge and information expected to be held by children of their age. Hauser and Marschark (2008) add that with each subsequent year in school, deaf children fall further behind hearing children especially if they do not have access to the language used in school.

A deficit perspective based on charity, which in turn is based on religious vocation, may also have its own limitations when it comes to teaching deaf learners. In the first place, it may reinforce the idea that there is little or nothing that human beings can do to change the plight of deaf learners since such conditions are divinely ordained. Related to this, the low expectations of deaf learners to which Storbeck, Magongwa and Parkin (2009) allude, may also be engendered and maintained by such perceptions. This paper proposes that any discussion of teaching deaf learners as a vocation needs to clearly separate the religious or devotional understanding from a secular understanding. We argue that while the benefits of religious vocation should not be forsaken, religious vocation should not mask the need for transparency in the education of deaf learners. A secular conception of vocation with a clearly articulated ideology might fulfil this need for transparency. This is because teachers' mental, physical, and moral attributes are open to empirical review as intentions of the stated ideology are usually transparent. The conceptualization of vocation in secular terms hinges on the identification of a clearly identified ideology. An example of such an ideology for teaching could be *ubuntu*, the African philosophy of life that describes group solidarity where such solidarity is central to the survival of communities and whose fundamental belief is "*umuntu ngumuntu ngabantu*" (a person can only be a person through others) (Mbigi & Maree, 1995). Since this philosophy of life advocates embracing others through whom one sees oneself, it would appear to also foster acceptance of people with disabilities. Broodryk (2006) explains *ubuntu* as 'humanness' while Edwards, Makunga, Ngcobo and Dhlomo (2004) elaborate that it has to do with being honest, accommodative, sharing, saving life at all costs and respecting young and old. Key aspects of *ubuntu* such

as accommodating young and old resonate with the ideology of UNESCO's (1994) inclusive education whose basic tenet is a respect for diversity. Inclusion could therefore be another clearly spelt out ideology which seeks to ensure that the school environment is adapted to embrace Deafness rather than expecting the deaf learner to adapt and fit into the school. Since teaching always reflects some form of intellectual, cultural and social imposition based on a particular ideological perspective (Flanagan, 2003) it is important to overtly articulate it especially in situations where the pupils are potentially members of a culture different from that of the teacher, as is the case with deaf children taught by hearing teachers. A clearly identified ideology such as *ubuntu* or inclusion would result in teaching with goals that are amenable to scientific scrutiny. We argue that the care, sensitivity, and patience, which a religious understanding of vocation implies can still be infused in secular vocation since according to van Manen (2007) teaching is ethical practice in the service of children. In the next section we explore the possibility of teaching deaf learners as a profession.

Pre-professional images of teachers may still feature prominently in public perceptions of the teacher of the Deaf. This might explain the deployment of teachers with nothing more than high school certificates and those with general teacher training to teach deaf learners in these schools. Pre-professional conceptions of teaching also appear to work in tandem with vocational conceptions. This is because as Hargreaves (2000) says, teaching is seen as technically simple, only requiring devotion to one's craft, demonstrating loyalty all of which would allow one to gain personal reward through service. These qualities are no doubt commendable but what is troubling is that in the pre-professional age teaching is taken as unquestioned common sense learnt through individual trial-and-error. This amateurish approach will do more harm than good to any learners let alone those with special educational needs such as deaf children. What is even more concerning is that such perceptions may be informed by teacher bias and generally low expectations of learners who are deaf (Moore & Martin, 2006; Storbeck, Magongwa, & Parkin, 2009). Deaf children's low educational outcomes compared to hearing peers (Brueggemann, 2004; Gregory, 1996; Wauters, van Bon & Tellings, 2006; Wood et al., 1996) would appear to lend credibility to a perception of teachers of deaf children as pre-professional. The vicious cycle of thinking here appears to be that they are seen to be performing poorly in academic subjects and so a teacher with little or no professional training is assigned to them as

teaching is trial-and-error anyway. This seems set to generate a cycle in which deaf learners' academic underachievement is almost guaranteed to continue as it is expected by teachers and then facilitated in terms of the level of curriculum that is taught as a consequence.

In the age of the autonomous professional, teacher education becomes increasingly embedded in universities, moving teaching closer to an all-graduate profession (Hargreaves, 2000). In post-independence Zimbabwe, many teachers of the Deaf went for specialized training in deaf education either locally or abroad (Musengi, 2014). Upon return to their schools there was relative freedom to choose methods of teaching deaf children especially in the early years of independence (Barcham, 1998; Chimedza, 2008). This appears to have been autonomy by default as there was no government policy to guide how Deaf learners were to be taught. This autonomy by default seems to have led to much individual variation and confusion in the schools for the Deaf. In some schools it led to using English, teaching through signed English, variations of Total Communication or Pidgin English to teach signs, Shona or Ndebele and the various subjects (Chimedza & Mutasa, 2003). The individual variability inside schools can also be attributed to exposure to different training programs for teachers of deaf learners at diploma and degree levels in Zimbabwe and abroad. The polarization of the oral-manual debate would be evident in the choice of methods by the individual teachers. Pedagogy had become an ideological decision which was constrained by the individual teacher's beliefs about deaf children's capabilities and where teachers located themselves on the oral-manual continuum. In an attempt to bring order, the individual schools imposed local aims and policies such as oral or total communication though there was no inter-school consistency in either local school policies or practices.

In the age of the collegial professional the expectation is that there would be more within-school, cross-school and international consultations rather than the individual efforts seen in the preceding era of the autonomous professional. The overriding concern would be development of a common purpose for the education and inclusion of their deaf learners. Teachers in this age would take more risks with approaches that have not been traditionally used in the residential special schools. Such risk-taking behavior might already be evident for example in the teachers' surreptitious use of ZSL in schools where official school policy is oralist, but academic outcomes have not been satisfactory. In the collegial professional spirit, the use of ZSL would no longer need to be

furtive but official as there would be no imposition of local policies.

In the age of the postmodern professional there is increased flexibility in the teaching of deaf learners. Focus could well be on meeting individual deaf children's needs rather than clinging onto a pedagogical ideology which is supposed to be a one-size-fits-all for deaf learners. Flexibility might also be expected to lead to a new understanding that the *in loco parentis* responsibility of teachers extends beyond the hearing, biological parents who are said by Mitchell and Karchmer (2004) to constitute the vast majority of parents of deaf children. Van Manen (2006) reminds teachers that they have an *in loco parentis* responsibility in times where many families experience difficulty maintaining cohesiveness. This appears to be particularly applicable to teachers in residential special school settings in an indigenous-traditional culture where disability is viewed negatively and parents may experience shame and blame if there is a child with a disability in their family (Chidyausiku, 2000; Mporu, Kasayira, Mhaka, Chireshe & Maunganidze, 2007). It is not uncommon for the cause of the disability to be attributed to something like the mother's presumed infidelity during pregnancy or unappeased ancestral spirits on the maternal or paternal side which could lead to the family breaking up or experiencing serious turmoil. Teachers of deaf children in such circumstances may need to act in place of the otherwise occupied parents and also assist parents in fulfilling their primary pedagogical responsibility as suggested by van Manen (2006) taking on what has been referred to as the multiplexity of teacherhood (Storbeck, 2004).

In professional teaching generally, the relationship between Deaf learners and the hearing adults who teach them may be motivated by either a deficit or an asset-based model of disability. Bourdieu's (2000) thinking tools of *habitus*, *field* and *hysteresis* could help illuminate the possible interactions resulting in deficit or asset-based interactions. After undergoing initial teacher-education which focuses on how to teach hearing children and specialist teacher-education focusing mainly on how to teach deaf children to behave like hearing children, a deficit model of disability usually undergirds teacher-pupil interactions. The deficit perspective that we outlined for vocational teaching would appear to be equally valid here. The teachers' attitudes and dispositions constitute the *habitus*, while school policies on teaching approaches are the *field* structures. The *habitus* of these teachers comprises an education philosophy acquired during teacher training, which largely focuses on trying to turn deaf learners into hearing people in practice. The

field structures may be supportive of the *habitus* for example a specialist in aural-oral methods teaching at an oral school. There is however the possibility of a mismatch between what was taught in teachers' college or university and conditions in the field. Conditions in the field in Zimbabwe as reported by Musengi and Dakwa (2011) are that it is usually the case that deaf children have not yet developed a sophisticated competency in any language by the start of school at seven years of age or later. The specialist's aural-oral training usually assumes intense auditory-based intervention (Nicholas & Geers, 2006) which started as early as two or three months of age as in developed countries such as the US where neonatal screening makes early detection possible (White, Forsman, Eichman, & Munoz, 2010). This mismatch between what was taught in college and the conditions in the field can result in *hysteresis* in which the professionally-trained teacher not only feels out of touch with time and place but also cannot think 'outside the box' of her professional training thereby missing opportunities to be innovative within a context that was not anticipated by training. The orally trained professional may spend many years falsely anticipating that the late identified, profoundly deaf child shall be able to discriminate speech sounds or produce intelligible speech. By focusing on what the deaf child cannot do the professional slides into the cycle of clinical practice.

In other words the professional utilizes what Vygotsky (1978) would call psychological tools from hearing culture while ignoring tools from a Deaf culture. This leads to a deficit based model of disability. It is understood that all good teaching utilizes culturally shaped tools such as in Vygotsky's zone of proximal development (ZPD) in which learning requires the assistance and scaffolding of another (more skilled in the area) for successful development and completion of this area of learning or skill. It is, therefore, important that professional teachers be aware of the possibility that in addition to their active role in the ZPD certain novice Deaf children may bring to the ZPD advanced cultural tools from their Deaf culture. This would mean becoming sensitive to the cultural perspective (held by Deaf people themselves) which views deafness as a natural condition, not a disability to be cured. According to Paul (2001) the cultural perspective argues that some Deaf individuals, as members of a distinct ethnic group, do not want to be like individuals with typical hearing as the abilities to speak and hear are not only unrealistic but also undesirable goals for most of them. It is within this cultural perspective that Lane (2008) argues that research studies that find a significant

discrepancy between the academic abilities of deaf and hearing students are framed within a medical deficit model where Deafness is regarded as a handicap and not just a receptive or expressive language difference.

A teacher's professional responsibilities might therefore be expected to differ markedly depending on whether the teacher was informed by the deficit or asset based model. These models represent bipolar positions related to the clinical and the cultural perspectives of deafness (Paul, 2001). Most teachers of deaf pupils work from within either model as shown by the polarized debate, conflict, struggle and a tendency for belief and conviction rather than evidence to drive practice (Barcham, 1998; Tomlinson, 1985). Swanwick and Marschark (2010) say that without exception, one can find strong arguments for the full range of approaches, whether auditory/oral methods, inclusive of sign language or a combination of the two and yet there is little evidence that supports any one of them with regard to educational outcomes. In the age of the postmodern professional as well as within a secular vocation there is need to move away from a tendency for belief and conviction to drive practice. What should drive practice is a strong sense of professionalism which has increased flexibility, focusing on meeting individual deaf children's needs rather than clinging onto a pedagogical ideology for any other reasons. What this means is that the status that spoken language has historically had over ZSL as a result of discrimination in favor of sounds can be questioned in a postmodern professional teaching approach. It is important that teachers of deaf children openly explore their knowledge and beliefs about D/deafness and ZSL so that it becomes clear to them whether they think teaching can utilize the visual, gestural, and tactile strengths of the Deaf learners or whether teaching can only utilize spoken language. This could also then lead to teachers exploring the option that it is not an 'either-or' debate, but that aspects of both ends of the continuum could be used or that in fact something brand new is needed.

Regardless of whether the teaching of deaf children is perceived as a vocation or a profession, ideally it should still have the same end - provision of ethical high quality service to the learners. This convergence on service to the learners is implied by the flexibility associated with postmodern professionalism as well as the transparent commitment in a perception of teaching as a secular vocation. On one hand, a postmodern view of teaching as a profession enables flexibility in moving between approaches to suit individual deaf learners' needs and strengths. On the other hand the view of teaching as a secular vocation enables sensitivity to the cultural perspective held by

the Deaf community. A combination of both secular vocationalism and postmodern professionalism can ensure that in teaching, the culture informing the ZPD is not predetermined. In practice this means that teachers would be able to take neutral positions in deciding on whether to use ZSL or a spoken language as language of instruction. It would also mean more openness about individual hearing teachers' limitations especially in instances where sign-bilingual approaches are chosen as teaching approaches. The current challenges in Deaf education can only begin to be resolved if teachers are forthright about combining the highest forms of professionalism and vocation in order to provide a transparent service.

Conclusion

The current discussion indicates that a teacher's perception of their role as an educator of Deaf learners as either a vocation or a profession does have important consequences for the way in which teaching and learning are likely to take place. Vocational perceptions that do not clearly distinguish between religious commitment and secular commitment seem likely to run into challenges in the area of transparency in education. Secular vocation has the strength that it can be verified and is transparent. However religious perceptions of vocation need not be discarded as they can be used not only for making sense of disability by those stakeholders with a religious inclination, but also to commit teachers who are religiously-inclined to their duty. Similarly, professional perceptions of teaching appear set to run into challenges if they are not premised on tailoring instruction on ideologies such as *ubuntu* or inclusive education. Such ideologies embrace diversity by advocating that barriers to learning be addressed so that all learners are accommodated and so would meet needs of individual Deaf learners. Flexibility in practice and openness to ideas that focus on learners' strengths rather than their deficits would seem to be characteristics of not only postmodern professionalism and secular vocation in teaching but also *ubuntu* and inclusive education. This would therefore suggest a combination between vocation and postmodern professionalism so that professional teachers do not only see it as a job or occupation but also get the emotive impact of making a difference in the Deaf learners' lives.

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Teachers' and Parents' Attitudes toward the Inclusion of Students with Intellectual Disabilities in General Education Schools in Egypt

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Abstract

One of the main challenges facing special and general education teachers and parents in Egypt stems from the current educational move toward inclusion. The current study investigated the attitudes of special and general education teachers and parents toward the inclusion of Egyptian students with intellectual disabilities in general education schools. A survey was carried out in two educational settings: special and general education schools. The attitudes of Egyptian special (n = 52) and general education teachers (n = 52) and parents of children with intellectual disabilities (n = 109) were surveyed. Thirty two special and general education teachers, the principal of special school and five parents who had children with intellectual disabilities were interviewed. Data analysis revealed that teachers and parents possessed negative attitudes toward inclusion. There are many factors that may contribute to this view, including a lack of teacher training.

In Egypt, "Education for All" is a right endowed and authorised by the Egyptian government, which has created opportunities for many children to join either general or special education schools (Ministry of Education, 2007). The inclusion of students with intellectual disabilities in general education classrooms in Egypt is a fairly new trend (Abdelhameed, 2010; EL-ashry, 2009). The Ministry of Education promoted a series of pilot projects in selected schools during the 2004-2005 academic year to fully include some children with disabilities, including students with intellectual disabilities, in general education classrooms. Although the number of general education schools that have inclusive classes for children with intellectual disabilities is increasing, the number of students who are fully included is still small. Special education schools remain the primary setting for educating students with special needs, including students with intellectual disabilities, in Egypt (Ministry of Education, 2007, 2012).

Recently, inclusive education has evolved as a movement to challenge exclusionary policies and practices and has gained momentum over the past decade. Inclusion has become the most effective approach for addressing the learning needs of all students in general education schools and classrooms (Cross, Traub, Hutter-Pishgahi & Shelton, 2004; Holden & Stewart, 2002). However, there are a multitude of factors behind successful inclusion. Recent research indicates that the success of inclusion programs is dependent upon teachers' attitudes toward inclusion (Crosland & Dunlap, 2012; de Boer, Pijl, & Minnaert, 2011; Salend, 2001; Van Reusen, Shoho, & Barker 2001). These attitudes are influenced by the teachers' perceived levels of efficacy, particularly in

the teaching of children with disabilities in their classrooms (Avramidis & Norwich, 2002; Odom, Buyse, & Soukakou, 2011). The teachers' attitudes have often been associated with the teachers' training at the pre-service level (Avramidis, Bayliss, & Burden, 2000; Campbell, Gilmore, & Cuskelly, 2003; Martinez, 2003; Shade & Stewart, 2001; Shippen, Crites, Houchins, Ramsey, & Simon, 2005). Positive attitudes among general and special education teachers are necessary for the success of inclusion. According to some studies, special education teachers tend to hold more positive and optimistic views about inclusion than general education teachers (Cook & Semmel, 1999; Forlin, Douglas, & Hattie, 1996; Romi & Leyser, 2006).

According to Lanier and Lanier (1996), teacher training may help educators respond better to students with special needs who are placed in general education classrooms. In contrast, teachers who lack training in the area of special education are more likely to hold negative attitudes toward inclusion. Lobosco and Newman (1992) analyzed data from teachers who were hesitant toward the inclusion movement. They indicated that teachers without training in special education not only demonstrated negative attitudes but also lacked confidence in their ability to teach students with disabilities. They found that the more exposure general education teachers had to students with special needs, the more willing the teachers were to include students with disabilities in their classrooms. Another reason teachers have negative attitudes toward inclusion is that they feel unprepared to teach students with special needs (Daane, Beirne-Smith, & Latham, 2000).

Research on parents' attitudes toward inclusion suggests that parents' attitudes affect the success of inclusion, and these attitudes have been shown to be more favorable when the parents are allowed to provide input into the decision-making process (Lewis, Chard & Scott, 1994). Furthermore, research has shown that there is a wide range of opinions among parents concerning the placement of children in educational settings. Some parents prefer and advocate for inclusive placement, while others favor separate placement (Grove & Fisher, 1999). Parents may recognize the educational, social, and emotional benefits of inclusive education for students with disabilities and for their peers without disabilities, but some parents feel that the needs of students with disabilities could be better met in special education classes (Gilmore, Campbell, & Cuskelly, 2003).

Palmer, Fuller, Arora, and Nelson (2001) analyzed the comments of 140 parents of students with severe disabilities who were in special education settings to identify the reasons for their support of, or resistance to, inclusive education. Positive affirmations about inclusive practices provided by approximately half of the parents revealed that they believed their children would experience enhanced achievement and develop improved functional skills due to the higher expectations and additional stimulation of general education classrooms. The parents who held negative attitudes toward inclusive practices reported that the severity of the child's disability meant that the general education classroom was not an option for their child. Parents also indicated that their anti-inclusion attitude was a result of the fact that general education classrooms focused on the academic curriculum rather than on basic living or functional skills, and it was the latter that they wanted for their children (Elkins, van Kraayenoord, & Jobling, 2003).

This current study investigated the attitudes of Egyptian general and special education teachers and parents toward including students with intellectual disabilities in general education schools. As mentioned before, inclusion is a fairly new trend in Egypt; the inclusion policy is still ambiguous, and many investigations about how to make inclusion successful in Egypt are greatly needed. The findings of this study may be useful for enhancing the practices of supporting students with intellectual disabilities in an inclusive setting.

Method

Participants

Surveys were distributed to 50 special education

teachers, 100 parents of students with intellectual disabilities at the special school for students with intellectual disabilities in Ismailia City. Surveys were distributed also to 50 general education teachers, two special education teachers, and nine parents of children with intellectual disabilities at Al-kassasin Primary school in the Ismailia Governorate. All of the participants from the special school were randomly selected except the principle. The general education teachers were randomly selected too but the principles and special education teachers and parents from the general school were selected via convenience sampling. Unstructured interviews were conducted with the principal of the special school, 20 special education teachers, five parents from the special school, two special education teachers from Al-kassasin Primary School and 10 general education teachers from the Al-kassasin Primary School to obtain more qualitative data regarding the attitudes of these individuals toward inclusion. The interviews were held with parents and teachers who agreed to participate in the interviews. These two schools were selected because they were the first schools in the Ismailia governorate to educate students with intellectual disabilities; therefore, they are the most experienced in students with intellectual disabilities' education. Students with intellectual disabilities in this study had mild intellectual disability; their IQ ranged from 50 to 70 while their chronological age ranged from 8 to 19 years old. Most of the parents had middle educational and socioeconomically status.

Instrumentation

The participants completed the Teachers' Attitudes Toward Inclusion questionnaire and Parents' Attitudes Toward Inclusion questionnaire. The questionnaires' items were developed by the researcher from measures of beliefs and attitudes toward inclusion that had been used in previous studies (Alvarez McHatton & McCray, 2007; Antonak & Larrivee, 1995; EL-ashry, 2009; Elkins et al., 2003; Gaad & Khan, 2007; McLeskey, Waldron, So, Swanson, & Loveland, 2001; Olson, 2003; Stoiber, Gettinger, & Goetz, 1998).

The teacher's questionnaire consisted of demographic information (the name of the participant was not included to allow confidentiality in responding to the questionnaires) and 25 items. Special education and general education teachers were asked to indicate if they agreed or disagreed with the statements by selecting one of the following three choices: agree, maybe, disagree. This scale was modified from the five-item Likert-type scale format (disagree, tend to disagree, tend to agree, agree and not applicable) to

make it easy to respond to the items. The parents' questionnaire consisted of 23 statements about the education of their children in general education classrooms.

The unstructured interview consisted of open questions addressing the following subjects: the participants' opinion about inclusion and support of inclusion, the academic level of the students with intellectual disabilities who attend special and general education schools, and the best setting in which these students can learn. The interview duration ranged from 20 to 25 minutes.

Procedure

Oral approval from participants was obtained to conduct this study. The researcher described the purpose of the study, and administered the questionnaires. The Teachers' Attitudes Toward Inclusion questionnaire was administered to the general and special education teachers during school day time. Parents' Attitude Toward Inclusion questionnaire was administered to the parents during school day time too. Interviews were conducted in both schools during school day time in a separate and quiet room. Participants were informed that their participation would be voluntary and their responses to the questionnaire would be anonymous. The interviewed participants were assured that the information collected was for research purposes only, that it would be kept confidential and their identity would remain anonymous. All participants were informed that their views toward including students with intellectual disabilities in the general education schools may help in improving the quality of the students' education.

Data Analysis. To analyze the qualitative data, the information was categorized and coded, themes or patterns were identified, and these themes were summarised in a meaningful way. To analyze the data from the questionnaire, one- and two-way Chi-square tests were used using SPSS v. 16.

Results

Special and General Education Teachers' Attitudes

The overall findings of this study indicated that special and general education teachers largely held negative attitudes toward the inclusion of students with intellectual disabilities in general education schools. Table 1 presents the statements about inclusion, percentages of agreement with the statements and the

results of the two-way Chi-square tests conducted to determine whether teachers' attitudes toward including students with intellectual disabilities in the general education school were negative or positive. Results revealed that there were no significant differences between the attitudes of special and general education teachers, except in items 6, 9, 15 and 17. The attitudes of these teachers are still negative in these statements, but for the statements six and nine, special education teachers had more negative attitudes than general education teachers, while on the second two items (15 & 17), the opposite was observed.

Regarding the interview findings, neither special nor general education teachers believed in the general concept of inclusion when asked whether they supported the idea of including students with intellectual disabilities in general education classrooms. Their comments about inclusion promptly reinforced the view that inclusion is a top-down decision in the Egyptian context. Their comments reflected a wide range of reasons supporting their perspectives. For instance, many participants offered that they did not favor inclusive education because of the challenges associated with teaching students with intellectual disabilities in general education classrooms, the negative impact on the academic level of general education students, and the behavior problems that might harm other students in the classroom. Two general education teachers stated the following:

We cannot afford teaching students without intellectual disabilities perfectly in our classes, so how can we afford teaching students with intellectual disabilities and how we can control them? And, if they are monitored by a special education teacher, how will he/she work? Our voices will interrupt each other and confuse other students; we think this is not a practical idea because of a lack of training in using this approach. Moreover, inclusion may result not only in academic failure but also may have a harmful psychological and emotional impact, especially on students with intellectual disabilities. In addition, students with intellectual disabilities demand special treatment that is different from the treatment of general education students. Therefore, it will be difficult for teachers to bring all these students together and teach them in one classroom. Both types of students will not benefit from this type of education.

Table 1

The views of Special and General Education Teachers about Including Students with Intellectual Disabilities in General Education: Percentages and Chi-Square Analyses.

| Items | Special Education Teachers. | | | General Education Teachers | | | χ^2 Value |
|---|-----------------------------|-------|----------|----------------------------|-------|----------|----------------|
| | Agree | Maybe | Disagree | Agree | Maybe | Disagree | |
| 1. Students with intellectual disabilities should be given every opportunity to function in the general classroom where possible. | 30 | 16 | 54 | 26 | 20 | 54 | 0.37 |
| 2. The inclusion of students with intellectual disabilities can be beneficial for students without disabilities. | 36 | 10 | 54 | 30 | 8 | 62 | 0.66 |
| 3. Inclusion promotes social independence among students with intellectual disabilities. | 24 | 10 | 66 | 28 | 4 | 68 | 1.45 |
| 4. The nature of study in the general classroom will promote the academic growth of the students with intellectual disabilities. | 32 | 4 | 64 | 30 | 6 | 64 | 0.23 |
| 5. The study skills of students with intellectual disabilities are inadequate for success in the general education classroom. | 74 | 4 | 22 | 80 | 10 | 10 | 3.65 |
| 6. Inclusion promotes understanding and acceptance of individual differences between students without disabilities and students with intellectual disabilities. | 20 | 4 | 76 | 40 | 18 | 42 | 12.69* |
| 7. Students without disabilities will likely avoid interacting with students with intellectual disabilities in inclusive classrooms. | 60 | 4 | 36 | 56 | - | 44 | 2.47 |
| 8. Inclusion promotes self-esteem among children with intellectual disabilities. | 30 | 2 | 68 | 26 | 14 | 60 | 4.89 |
| 9. Students with intellectual disabilities lose the stigma of being "different" when placed in general education classrooms. | 26 | 2 | 72 | 18 | 20 | 62 | 8.46* |
| 10. Isolation in a special classroom has beneficial effects on the social and emotional development of students with intellectual disabilities. | 56 | 8 | 36 | 68 | 8 | 24 | 1.78 |
| 11. General classroom teachers have sufficient training to teach students with intellectual disabilities. | 2 | - | 98 | | | | 1.01 |
| 12. Students with intellectual disabilities are likely to create confusion in the general education classroom. | 80 | 4 | 16 | 80 | 2 | 18 | 0.39 |
| 13. Teaching students with intellectual disabilities is better done by special rather than general classroom teachers. | 98 | 2 | - | 100 | - | - | 1.01 |
| 14. The behavior of students with intellectual disabilities will set a bad example for other students in the classroom. | 64 | 16 | 20 | 50 | 30 | 20 | 2.99 |
| 15. Students with intellectual disabilities will not waste the general classroom teacher's time. | 10 | 4 | 86 | - | - | 100 | 7.53* |

(Continued)

(Table 1 Continued)

| Items | Special Education Teachers. | | | General Education Teachers | | | χ^2 Value |
|--|-----------------------------|-------|----------|----------------------------|-------|----------|----------------|
| | Agree | Maybe | Disagree | Agree | Maybe | Disagree | |
| 16. It is likely that the students with intellectual disabilities will exhibit behavior problems in a general education classroom. | 80(100) | 2 | 18 | 90 | 4 | 6 | 3.63 |
| 17. Students with intellectual disabilities will make an adequate attempt to complete their assignments in general education classrooms. | 30 | 4 | 60 | 10 | 14 | 76 | 6.27* |
| 18. General classroom teachers have the primary responsibility to teach students with intellectual disabilities in their classrooms. | - | - | 100 | - | - | 100 | 0.00 |
| 19. Inclusion will likely have a negative effect on the emotional development of students with intellectual disabilities. | 40 | 20 | 40 | 44 | 24 | 32 | 0.72 |
| 20. General classroom teachers have the appropriate capability to work with students with intellectual disabilities. | - | - | 100 | - | - | 100 | 1.01 |
| 21. Inclusion of students with intellectual disabilities will necessitate extensive retraining of general classroom teachers. | 100(100) | - | - | 100 | - | - | 0.00 |
| 22. Students with intellectual disabilities can be best served in general education classrooms. | 10 | 22 | 68 | 4 | 6 | 90 | 7.39* |
| 23. It is difficult to maintain order in classrooms that contain a mix of students with and without intellectual disabilities. | 98(100) | 2 | - | 92 | 4 | 4 | 2.43 |
| 24. The behavior of students with intellectual disabilities does not require more attention from the teacher than the behavior of students without intellectual disabilities does. | 10 | 14 | 76 | 2 | 2 | 96 | 8.33* |
| 25. A student with an intellectual disability will most likely develop academic skills more rapidly in a general education classroom than in a special education classroom. | 4 | 6 | 90 | 4 | 4 | 92 | 0.21 |

* $p < 0.05$

In summary, the special and general education teachers in this study did not support the idea of including students with intellectual disabilities in general education classrooms. They shared a strong belief that including students with intellectual disabilities in general education classrooms might not benefit either students with or without disabilities. The teachers raised concerns about the potential negative impact on the academic needs of students without disabilities. They were also worried about the psychological and emotional impact of the inclusion of the students with special needs. Moreover, most participants doubted their abilities to teach these

students in their classrooms. Thus, they recommended special education settings to better accommodate students with special needs.

Parents' Attitudes

The attitudes of parents about including their children with intellectual disabilities in the general education school are displayed in Table 2. The parents were generally not supportive of the benefits of inclusion for children with intellectual disabilities. They did not believe in the mutual benefits of social interaction, including greater independence, greater

Table 2

Parents' Views about Including Students with Intellectual Disabilities in General Education: Percentages and Chi-Square Analysis.

| Items | Special School | | | General School | | | χ^2 |
|---|----------------|-------|----------|----------------|-------|----------|----------|
| | Agree | Maybe | Disagree | Agree | Maybe | Disagree | Value |
| 1. My child's needs are best served through separate classes. | 90 | - | 10 | 77.77 | - | 22.22 | 578.45 |
| 2. More patience is required for the classroom behavior of my child. | 98 | - | 2 | 100 | - | - | 706.46 |
| 3. Participation in the general classroom will promote academic growth. | 20 | 40 | 40 | 22.22 | - | 77.77 | 160.27 |
| 4. Inclusion offers mixed-group interactions, which will foster understanding and acceptance of differences. | 40 | 10 | 50 | 44.44 | - | 55.55 | 214.81 |
| 5. General education teachers have a great deal of expertise. | - | - | 100 | - | - | 100 | 742.09 |
| 6. Special classroom placement would have a negative effect on social and emotional development. | 10 | 10 | 80 | 11.11 | 11.11 | 77.77 | 433.00 |
| 7. More rapid development of academic skills occurs in special versus general classrooms. | 90 | 2 | 8 | 100 | - | - | 575.54 |
| 8. Inclusion will require significant changes in general classroom procedures. | 100 | - | - | 100 | - | - | 742.09 |
| 9. Most children with intellectual disabilities are well behaved. | 30 | 20 | 50 | 11.11 | 11.11 | 77.77 | 178.45 |
| 10. Contact with general classroom children may be harmful to my child. | 70 | 10 | 20 | 77.77 | 11.11 | 11.11 | 323.90 |
| 11. General classroom teachers have sufficient training to teach children with intellectual disabilities. | - | - | 100 | - | - | 100 | 742.09 |
| 12. Including my child with an intellectual disability promotes his/her independence. | 20 | 14 | 66 | 11.11 | 22.22 | 66.66 | 283.18 |
| 13. It is likely my child with an intellectual disability will show behavior problems in the general classroom. | 40 | 20 | 40 | 66.66 | 22.22 | 11.11 | 160.27 |
| 14. Inclusion of students with intellectual disabilities can be beneficial for general classroom students. | 10 | 50 | 40 | 22.22 | 22.22 | 55.55 | 214.81 |
| 15. Students with intellectual disabilities have to be told exactly what to do and how to do it. | 90 | 4 | 6 | 100 | - | - | 574.09 |
| 16. Inclusion is likely to have a negative effect on social/emotional development. | 78 | 20 | 2 | 66.66 | 11.11 | 22.22 | 422.81 |
| 17. My child with an intellectual disability will be socially isolated from other children. | 90 | - | 10 | 77.77 | 11.11 | 11.11 | 578.45 |
| 18. Parents of students with intellectual disabilities present no greater problem for classroom teachers than other parents do. | 100 | - | - | 100 | - | - | 742.09 |
| 19. Inclusion will necessitate extensive teacher retraining for teaching children with intellectual disabilities. | 100 | - | - | 100 | - | - | 742.09 |

(Continued)

(Table 2 Continued)

| Items | Special School | | | General School | | | χ^2 |
|---|----------------|-------|----------|----------------|-------|----------|----------|
| | Agree | Maybe | Disagree | Agree | Maybe | Disagree | |
| 20. Students with intellectual disabilities are likely to create confusion in the classroom. | 64 | 4 | 32 | 77.77 | 11.11 | 11.11 | 299.90 |
| 21. The presence of students with intellectual disabilities will promote acceptance of differences on the part of other students. | 40 | 20 | 40 | 33.33 | 11.11 | 55.55 | 160.27 |
| 22. My child will make friends with non-disabled children. | 40 | 30 | 30 | 33.33 | 11.11 | 55.55 | 142.09 |
| 23. My child will imitate normal behaviors in the general classroom. | 60 | 20 | 20 | 33.33 | 22.22 | 44.44 | 233.00 |

understanding and tolerance by their peers, friendship with non-disabled peers and academic advantages. Parents were supportive of the benefits of special classes. All parents stressed that extensive changes in general education classroom procedures would need to happen and that these changes would require substantial additional training for general education teachers.

The qualitative analysis of the interviews revealed that neither parents who enrolled their children in the special school nor those who enrolled their children in the general education school were supportive of the idea of inclusion. The parents of the special school students noted that their children received good services in the special school and that all of the children in this school were the same so they understood each other. Parents thought that in the general education school, the students without disabilities would harm the children with special needs and treat them differently. One mother noted that she would prefer to travel a long distance to collect her child from the special school than to put her child in a general neighbourhood school because the child would not be cared for in the general neighbourhood school. Another mother indicated that she withdrew her child from the general education school and put him back in the special school because her child felt different; she preferred to bring him back to the special school because he was receiving good services there. Likewise, the special education teacher who was working in the general education school said that the number of students with intellectual disabilities who were included in his class had decreased and that these students did not attend generally. He reported that the mothers of the students with disabilities said that their children felt different and that the students without intellectual disabilities in the school did not treat their children well.

Discussion

The main finding of this study was that the attitudes of Egyptian special and general education teachers toward including students with intellectual disabilities in general education schools were negative, and this result coincides with the results of the few Egyptian studies that investigated the concept of inclusion in Egypt (Abdelhameed, 2010; EL-ashry, 2009). The results of this study support the results of a large study related to inclusion in which the Ministry of Education investigated the attitudes of educational personnel (e.g., teachers, principals, school psychologists) toward including students with special needs at the elementary school level. The results of this study indicated that only 11% of general education teachers and 10% of special education teachers supported the idea of including students with special needs in general education classrooms in Egyptian schools. The main concern of teachers was the lack of educational personnel who were prepared to work in inclusive settings (Kafafi, 2004). This finding is similar to EL-ashry's (2009) findings. EL-ashry reported that the attitudes of pre-service teachers were more negative toward including children with intellectual disabilities in the general education school than they were toward including students with other disabilities (e.g., hearing and visual impairments).

The negative attitudes of the special education teachers toward inclusion in this study conflict with the findings of some studies conducted in the West that special education teachers tend to hold more positive and optimistic views about inclusion in comparison with general education teachers (Forlin et al., 1996; Romi & Leyser, 2006; Semmel, Abernathy, Butera, & Lesar, 1991; Villa, Thousand, Meyers, & Navin, 1996). This contrast may have resulted from the presence of many factors that make inclusion

successful, such as good training and support for special education teachers.

The interview data revealed that there were several explanations that contributed to the negative attitudes of special and general education teachers toward inclusion. Firstly, for many years the educational system communicated that separate education for students with disabilities was better, and then this view was suddenly changed. Because the educational system believed that separate education for students with disabilities was better for so long, it is not logical to expect people to automatically believe that this new change is for the best (Keenan, 1997).

Secondly, there is a lack of teacher training on inclusion. Special and general education teachers stated that they needed extra training in the area of teaching students with special needs (Abdelhameed, 2010; Keenan, 1997). The majority of special education teachers in the special and general education schools in this study were not sufficiently qualified to work with students with intellectual disabilities. Furthermore, the general education teachers in this study did not receive any training in teaching children with special needs. Abdelhameed (2010) reported that there were two ways to choose a teacher to teach children with intellectual disabilities in Egypt. Teachers who had not graduated from school of education but had teacher's diploma (a qualification degree less than college degree) and they worked at general education schools, in particular primary and preparatory schools, and wished to move to work at special schools. The second way is the teachers who graduated from school of education that might or might not have a special education diploma. The first category consists of 75% of the special schools' teachers.

Thirdly, the teachers in this study may not have been informed that students with special needs, especially students with intellectual disabilities, would be included in general education classrooms and that, as general educators, they would be responsible for teaching these students in their classrooms. Fourthly, because expanding inclusive services is a relatively new governmental policy and because general education schools are the major providers of educational services in Egypt, the vast majority of teachers have not had the opportunity to be involved in the discussions or debates about inclusive education for students with disabilities. Moreover, many educators and researchers may not have heard about the changes that have been made at the level of the Ministry of Education because of the notable disconnect between educational institutions in Egypt (EL-ashry, 2009).

The parents in the current study also did not accept the idea of inclusion because their children were not well supported in general education schools. This finding contradicts that of other studies (e.g., Daniel & King, 1997; Grove & Fisher, 1999). Evidence suggests that parental attitudes toward inclusion can be positively enhanced if adequate information about the benefits of inclusion is given (Green & Shinn, 1995). Furthermore, Yesseldyke, Lange, and Gorney (1994) found that parents of students with disabilities seek an educational system that meets their child's educational needs. This type of system would include frequent communication with parents, adequate attention for the child, and allowing their child to attend school with siblings and peers. Parents must feel that general education classroom teachers are able to accommodate their children's learning needs (Palmer et al., 2001). To summarise, this study confirms that care is needed to ensure that resource levels are such that students with intellectual disabilities can receive appropriate education within general education classrooms. Additional targeted in-service education programs are needed for special and general education teachers who work with students with intellectual disabilities.

Implications, Recommendations, and Conclusion

This study was conducted to provide a descriptive analysis of the attitudes of Egyptian special and general education teachers and parents toward including students with intellectual disabilities in general education schools. The most important finding of this study was that the attitudes of the teachers and parents toward inclusion were negative. These attitudes were more negative toward the academic aspects of inclusion, independence, and tolerance by their children's peers. Teachers and parents viewed isolated settings as the best place for students with intellectual disabilities to learn and develop.

It is apparent that with the gradual inclusion of children with disabilities in the general education classroom, there is need for special education content to be incorporated into general education teacher preparation, and vice versa (Hsien, 2007). Furthermore, the negative attitudes of teachers and parents could be positively influenced by: (a) using structured workshop activities for teachers and parents (Bishop & Jones, 2002); (b) providing contact with people with severe disabilities (Brownlee & Carrington, 2000); (c) raising teachers' awareness of different types of disability (Campbell et al., 2003); and (d) training teachers to use inclusive instructional

techniques (Andrews & Clementson, 1997 as cited in El-ashry, 2009).

According to D'Alonzo, Giordano and Vanleeuwen, (1997), teachers need to have positive attitudes toward inclusion for inclusion to be successful. For teachers to have positive attitudes, they need to feel prepared and supported by their peers, school administration, and other staff for the increased workload that will be required of them and the changes that will take place. One way to prevent teachers from feeling overwhelmed is to team teach. Including and provision of good educational services for students with intellectual disabilities in general education schools in Egypt may require improvements based on the findings of research conducted in the area of inclusion at the local, national and international levels.

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Supporting Novice Special Education Teachers in Delivering Inclusive, Culturally Responsive Instruction

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Abstract

The authors explore novice special educators' abilities to implement inclusive, culturally responsive teaching practices. Given the demanding roles that new special educators assume, the authors describe measures used to examine teachers' developing pedagogical knowledge and skills in these areas (inclusive, culturally responsive practices). To understand these interactions, the researchers analyzed narrative data collected using monthly reflective prompts and field notes from classroom observations. Findings identify explicit ways that the novice teachers used inclusive, culturally responsive practices related to environmental print, student belonging, and instructional materials. The authors conclude with a discussion of novice teachers' professional development goals and suggested ways teacher educators can contribute to the advancement of special education teacher preparation.

New teachers worldwide encounter an array of competing demands as they transition into the profession. A teacher's first year on the job is often a tough one. While new teachers bring energy and enthusiasm to their classrooms, they will likely encounter a multitude of challenging situations (Conderman, Johnston, Rodriguez, Hartman, & Walker, 2012). Three of the most common challenges facing new teachers in the U.S. include classroom management, curricular burdens, and unsupportive environments (Goodwin, 2012). Student achievement tends to be lower in the classrooms of first-year teachers before rising in the classrooms of second and third teachers (Rivkin, Hanushek, & Kain, 2005). Evidence of the challenges of a career as a special education teacher are revealed and well documented in extensive investigations examining teacher retention (Boe, Cook, & Sunderland, 2008; Rivkin et al., 2005; Sindelar, Brownell, & Billingsley, 2010). According to Rivkin et al. (2005), the steep learning curve that teachers experience leads to 15 percent of new teachers leaving the profession and another 14 percent changing schools after their first year due to feelings of isolation and ineffectiveness.

Challenging accountability demands in P-12 schools and higher education (Sayeski & Higgins, 2014) are met with growing diversity present in today's school-age population (Center for Public Education, 2012) further contributing to the demands on new teachers. Specifically, this study investigated the ways that novice special education teachers who profess a commitment to inclusive, culturally

responsive pedagogy apply their knowledge and skills of such practices in the classroom.

The realities of growing ethnic, racial, cultural, linguistic, and ability diversity in the school-age population represent a demographic imperative for all educators (Ford, 2012; Ford, Stuart & Vakil, 2014; Garcia, Arias, Harris Murri, & Serna, 2010) and ensuring the availability of competent special education services is a global imperative. Approximately 150 million children worldwide live with disabilities, yet 98% of children with disabilities in developing countries do not even attend school (UNESCO, 2012). Additionally, as the population of students with second language needs has skyrocketed to over 4.5 million in U.S. schools (Zehr, 2009), 9% of those individuals are students with a disability (Zehler, Fleischman, Hopstock, Pendzick, & Stephenson, 2003), thus contributing to educational challenges. Efforts to educate individuals with disabilities are often compromised due to an absence of resources, deficit-perspectives regarding cultural beliefs, and limited professional training (Ellsworth & Zhang, 2007). Artiles (2009) advocates for attention to existing racial injustices in the United States educational systems, including disparities in achievement, disproportionality in the referral, identification, and placement and inequities in disciplinary actions, school completion, and transition to college and work. From small private or public schools to international organizations, calls for joint efforts to deliver effective educational opportunities

that foster inclusive communities and social justice are underway (UNESCO, 2012).

Interest in teaching responsively has increased steadily since the mid-1990s given evidence which shows that students from diverse backgrounds and with diverse needs consistently underperform academically (Rychley & Graves, 2012). Inclusive, culturally rich contexts are compounded for educators who themselves admit they are not prepared for effective instruction of students with linguistic, and/or distinct academic needs (Ford, 2012). This raises serious concerns about the quality of services these teachers are then able to provide to students with diverse needs and from diverse backgrounds.

All teachers, novice and veteran alike can count on working in ever-changing, dynamic classrooms. While a precise script for creating an inclusive and responsive classroom is unrealistic, rich resources and evidence-based practices that incorporate both inclusive and multicultural principles are recommended (Grant & Sleeter, 2008). At its core, inclusive, responsive teaching practices are the ways teachers thoughtfully design their classrooms, their lessons, and their behaviors in ways that recognize the uniqueness of all students and better prepare them to live in a world of increasing diversity (Cartledge, Gardner, & Ford, 2009).

Responsive teaching practices exemplify a commitment to reach all learners with and without disabilities as well as students from varied ethnic, linguistic, religious, and economic backgrounds (Villegas, 2007). Teachers must be provided structured opportunities to examine their beliefs and the connection between those beliefs and recommended best practices. Taylor and Sobel (2011) share a professional development model for teacher reflection on components of inclusive, responsive teaching (e.g., environmental print, instructional accommodations, student belonging, instructional materials, distribution of attention, standards for positive behavior, and evidence of student understanding) providing teachers with an opportunity to demonstrate how their beliefs in equity and social justice can be realized through their practice.

While novice teachers may have assimilated the ideals of inclusive, culturally responsive practice from their preparation program, they will need support and practice to put them into place. Such transformative practices will take time and focused effort for teachers to understand how to balance the demands of the job while acting on their strong commitment to successfully teach all students (Porfilio & Malott, 2011). The preparation provided by a teacher preparation program is only the beginning (Dunst &

Bruder, 2014). Implementing inclusive, culturally responsive pedagogy requires extended time and differentiated support for teacher proficiency to be a reality.

The aforementioned challenges must rise to the forefront of consideration for faculty in higher education. Trent, Kea, and Oh (2008) assert that research on the pedagogical behaviors of teachers in culturally diverse schools is sorely lacking. They call for research that investigates teachers' developing pedagogical knowledge and recommend that these tough and sometimes uncomfortable issues be examined using a problem-solving framework that proactively acknowledges and plans for interconnected school related activities and tensions (e.g., dispositions, skill level, and the complexities of school settings). Ensuring that collegial supports are in place to allow teachers to reflect on their pedagogical knowledge is a pressing reality. Committed, reflective teachers are those that critically examine practices that effectively reach students with diverse abilities and from diverse backgrounds. Reflecting on and attending to explicit teaching components provides educators with an introspective opportunity to ponder how their values and beliefs in equity and social justices are realized through practice and behavior (Taylor & Sobel, 2011). Inclusive, culturally responsive teaching practices encompass all aspects of classroom life including the classroom environment designed by the teacher. But what do such classrooms look like? Customized guides focused on observing, assessing, and mentoring teachers' abilities to meet the diverse needs of all students offer one way to serve this need. One such observation tool illustrates a variety of key elements of inclusive, culturally responsive pedagogy and supports relevant to: preparations prior to instruction; curriculum, content, and material decisions; classroom environment design; grouping strategies to promote language and learning; personalized instructional adaptations; strategies for distributing teacher attention equitably; checking students' understandings; innovative and culturally responsive ways to connect with families, local culture, and the students' community; and personal and professional growth in culturally responsive pedagogy (Taylor & Sobel, 2011).

Given limitations in the literature, we asked these important questions: What do novice special education teachers who commit to being culturally responsive say about their pedagogical knowledge and skills in inclusive, culturally responsive practices; how are those skills realized in their classrooms; and how can teacher educators use that information to improve teacher preparation? Seeking answers to these

questions was done in collaboration with five novice teachers who graduated from a teacher preparation program located at a large, urban university in western United States with a master's degree and special education teaching certification. The School of Education at this university is committed to equity in urban and diverse communities and the merged general and special education program partners with professional development schools (PDSs) to jointly prepare teacher candidates for educating students with diverse academic, linguistic, and social needs in inclusive public school settings. This rich network of PDSs currently includes 28 schools across 6 metro districts that serve the needs of an array of diversity: 8-70% English Language Learners, 40-97% students of color, 10-16% students with special needs, and 35-90% students impacted by poverty. Extensive coursework and structured, concurrent field experiences lead to a master's degree and certification as a Special Education Generalist, which under state certification approves teachers to work with students between ages 5-21 years across all disability areas.

Method

Participants

This study focused on the reflections and demonstrations of inclusive, culturally responsive teaching practices of newly licensed teachers. Participants for this research were five newly credentialed special education teachers in their first year of teaching. The sample of novice teachers was drawn from a graduating cohort of twenty-three students. An invitation to participate in an examination of inclusive, culturally responsive teaching practices was extended to the full cohort of graduates. Nine students expressed interest in being involved in the study, however three of those individuals moved out of the state and one opted to delay her teaching career for health reasons, leaving five female participants (see Table 1).

Administration of Measures

This study used two methods of collecting data. These included reflective prompts and observations.

Reflective Prompts

During the nine-month study, the novice teachers responded in written narrative to reflective prompts provided throughout the school year (September – May). Monthly prompts addressed topics relevant to

predictable classroom routines and rhythms such as, creating the classroom environment, planning instructional materials, assessments, and interacting with families and parents. Prompts reported in this study included:

- List examples of environmental print that reflect the different ethnic/cultural, linguistic, ability levels, learning styles, and/or interest of your students. Discuss examples of the environmental print displayed about the room that demonstrates a valuing of diversity include visual supports, posters, banners, photographs, flags, maps, student work, etc.
- Choose and elaborate on a proactive strategy you use to foster student belonging, acceptance, and encouragement of each other. Discuss illustrations of grouping strategies that enhance student achievement and promote non-like group interaction (i.e., language, ethnicity, ability level, gender, etc.).
- From a recent unit of study, identify specific materials you selected due to the different ethnic/cultural, linguistic, ability levels, learning styles, and/or interest of your students.
- Talk about a concrete example of how you have involved family members of your students, especially those who are underrepresented members of the community.

Observation Tool

The researchers observed novice special education teachers' classroom instruction in a lesson of their choice during the spring semester. Using an observation protocol with a focus on culturally responsive pedagogy (Taylor & Sobel, 2011), researchers met with teachers before and after the classroom observation. Given that culturally responsive teaching practices encompass all aspects of classroom life, the researchers wanted to ensure the teachers had an opportunity to explain their intentions, classroom instruction, and interactions during the observed lesson.

Procedures

For this study, participants received one reflective prompt electronically at the start of a given month. Receiving the prompts electronically at the start of a given month, teachers could take the entire month to

Table 1

Teacher Characteristics

| Teacher* | Age | Ethnicity | Religion | Teaching Assignment |
|-----------------|------------|------------------|-----------------|--|
| Lee | 24 | Caucasian | Episcopalian | Urban Middle School Resource room and support provided in grades 6-8 |
| Marnie | 27 | African American | Christian | Urban Elementary School Resource room and support provided in grades 3-4 |
| Rebecca | 28 | Caucasian | Jewish | Urban Elementary School Resource room and support provided in grades K-3 |
| Sarah | 35 | Caucasian | Jewish | Urban High school Learning lab and support provided across the 9 th grade team |
| Anna | 38 | Hispanic | Not specified | Urban Elementary School Resource room and support provided in grades 3-5 |

*Pseudonyms

reflect on the prompt then submit their written narrative electronically. This response format was intentionally designed to respect and accommodate for the demands of the novice teachers.

In addition to the reflective prompts, observations were conducted for each teacher carrying out an instructional lesson of their choice. The scheduled observation sessions all began with a pre-coaching session, where the teacher and the observer discussed the planned lesson and classroom contextual details, followed by an observation of the planned lesson, and concluded with a post-coaching conversation to discuss points of clarification and set goals for professional development. During each of those observations, the researchers recorded extensive field notes documenting exemplars within each of the following areas of practice: environmental print, strategies to enhance student belonging, grouping strategies, and instructional materials.

Qualitative data from observation field notes and reflective prompts were coded line-by-line using the constant-comparative analysis (Strauss & Corbin, 1998). The process involved the researchers thoroughly reading data to get a sense of the information. The researchers conducted multiple passes of the written field notes and observation forms. Various electronic tools (e.g., highlighting, comment bar, theme format) were used to manage and analyze the data by the following categories: environmental print; strategies to enhance student belonging/grouping

strategies; and instructional materials. Further, an inductive approach was used to identify additional codes for responses made that did not fit into initial categories. In the final step, selective coding was conducted and explicit themes were identified.

Results

This study revealed several findings about the beliefs and practices of novice special teachers who are committed to inclusive, culturally responsive pedagogy.

Reflective Prompts

To answer the question, “What do novice special education teachers say about their pedagogical knowledge and skills in inclusive, culturally responsive practices?” the researchers examined written narratives to the reflective prompts to understand how new teachers articulate their planning for such practices. The results showed several important aspects relating to environmental print, student belonging and grouping strategies, material selection and family involvement.

Environmental print. Participant responses to the prompt seeking examples of environmental print that reflect the different ethnic/cultural, linguistic, ability levels, learning styles and/or interest of their students clustered around the following categories: a) student

generated products; b) displays that were reflective of the students' families and communities; c) visual supports to print; and d) decorative and informative displays. Two of the participants, Lee and Anna, stated that posters in English and Spanish were used to support friendship and academic skills. Marnie and Sarah used commercial decorations (flags and clothing representative of varied countries). All five teachers displayed student work in the classroom. Marnie described an array of materials to support instruction in her math and science classes including: number lines and multiple posters (e.g., math symbols, money, place value, measurement, multiplication facts, length conversion, body systems, food pyramid, states of matter, and planets). Rebecca shared that this prompt triggered a critically look of her school:

I visited popular areas within my school; unfortunately there was little to see. I wouldn't have noticed this so blatantly if it were not for this prompt. I saw environmental print of different ethnic and cultural groups, however I did not see any pictures that depicted ability. I wonder—while the motivational pictures of celebrities and athletes may be appealing to some, do students from other countries even know who those celebrities are?

Student belonging and grouping strategies. General themes that emerged from the prompt asking for proactive strategies used to foster student belonging, acceptance, and encouragement of each other centered on both practical logistics (e.g., seating arrangements) and activities to support social and emotional growth. Lee planned a lesson to introduce her middle schools to the issue of learning disabilities clarifying she wanted to “Help my students understand what a disability is, how it affects a student and how everyone can help use personal strengths to be better readers.” Marnie explained that she strategically tried to group students across grade levels to ensure that students were with same-aged peers. Rebecca described that she was working to set-up a weekly social skills group, “I want to focus on specific communication skills such as listening, eye contact, asking questions while discussing actual events that happened in class.” Rebecca also shared that “In an effort to create and nurture the classroom culture, my students snap their fingers as a way to complement each other.” Sarah maximized a wide selection of music throughout the day. She also has her high school students create personalized road maps, explaining:

They pick any point in their life and reflect on roadblocks. Adding short and long-term goals allows them to express with pictures where they would like to be and what they need to accomplish this. They have been engaged when I encourage them to add road signs such as people, degrees, and experiences as benchmarks they will need to plan for.

Anna noted that she paid particular attention to making girls feel as comfortable as possible. This teacher also provides multiple opportunities to talk and practice verbal English exchanges and allows students to choose where they sit to get work done (i.e. table, bean bag chair, floor, and standing). Comments to this prompt also reflected teacher understandings of the importance of this work as a foundation for setting up their classroom. Marnie shared, “The further I get into the year, the more I realize that equity and diversity are the core to best practice. Providing a safe learning environment so everyone can ask questions must be my norm.”

Materials. The topic of material selection revealed attention to an array of culturally representative, multisensory, and age-appropriate materials. Lee secured novels and reference materials to support various skill levels and the backgrounds of her learners, explaining, “I want them to have access to books about people like them.” Marnie mentioned that she tries to maximize color and real-life images in every poster and had recently created an art display in a hallway case that allowed for students to touch the different mediums and textures. Marnie shared that in a recent writing lesson on traditions she required students to write about a family recipe. She prepared individualized advance organizers, used texts highlighting chefs from countries of student origins, had multiple cookbooks in various languages and reading levels available, and allowed students to work on notebooks and computers with text/speech software. All submissions were compiled and published in one cooperative group document. Sarah explained that she creates workbaskets for students with significant developmental delays to be accessed in general education settings. Representative resources included small white boards, file folders with vocabulary cards and accompanying photographs, an Ipad loaded with “calming down strategies” applications, visual schedules, a timer, and personalized pictures for directions and reminders. Sarah clarified that the vocabulary cards and photographs were custom-made to reflect the students' interests and backgrounds and the iPad applications

supported multisensory learning, inclusion in group work and access to the general education curriculum.

Rebecca and Anna expressed their efforts to secure books of varied ability. Anna shared, "I'm choosing materials for my guided reading groups that thematically coincide with students' interests, their cultural backgrounds, age, and ability levels. I learned a lot about horses due to one student's interest in visiting his grandfather's farm in Mexico." As she moves in and out of multiple general education math classes, Anna explained that she stocks her traveling cart with flash cards, blocks, multiplication CDs, videos, differentiated drill and practice forms, and games in an effort to accommodate for the varied learning styles, backgrounds, abilities, and interests of her students.

Family involvement. Each teacher offered exemplars of ways they have been involved with family members. Every teacher acknowledged their involvement in special education staffings, conferences, and email and telephone communications. Marnie and Anna expressed concern over the logistics of securing translation assistance in a timely manner when communicating with family members who speak a language other than English. Lee, Marnie, and Rebecca had involvement in school/family newsletters. Lee helped coordinate school-wide efforts to support family members by using posters announcing the family lending Biblioteca with books and magazines in other languages and a school-wide monthly tips newsletter and billboard printed in Spanish and English. Marnie and Rebecca used "back and forth" notebooks as a way to share information (e.g., medications, behavioral changes, home and school routines, academic performance).

Classroom Observations

To gain an understanding of the first year teachers' developing pedagogical knowledge, results from classroom observations were analyzed to answer the question, "What are the practices of teachers who are committed to teaching all learners equitably?" Exemplars of novice teacher demonstrated practices related to environmental print, student belonging, grouping strategies, and instructional materials provided a focus for each observation. Each observation concluded with a conversation about goals for continued professional development.

Environmental print. The component of environmental print focused on examples of materials that reflect the different ethnic/cultural, linguistic, ability levels, learning styles, and/or interests of the

students. Explicit examples were varied and fell into four categories: a) student generated products; b) displays that were reflective of the students' families and communities; c) visual supports to print; and d) decorative and informative displays.

All five teachers used student-generated products such as student writings, drawings, student ideas/suggestions, and student news articles. For example, Lee, Marnie, and Sarah prominently displayed student work. Rebecca exhibited student-produced newsletters (Spanish and English translations) near the front door of the classroom and Anna hung student posters depicting their personal interests. Lee, Rebecca, and Anna used displays that were reflective of the students' families and communities. Lee had taken an array of photographs of the local community (e.g., recreation center, fast-food restaurants, street signs, grocery stores). She enlarged those photographs, labeled each in English, Spanish, and sign language, hung them from the ceiling and used them with personalized student prompts during a writing activity. Anna used information from a writing assignment on "autobiographies" to illustrate individual student drawings and displayed a map of Latin America and colorful pins identified where student families were from. Examples of visual supports to manage classroom routines, positive behavior strategies, and supports for content instruction were displayed by all teachers. Lee referred to a poster labeled, "MELT" during a social skills group. This poster reminded students that a strategy for dealing with their frustration was to **M**ellow-out; **E**mpy out any negativity; **B**e **L**aid-back; and aim for **T**ranquility. Rebecca's classroom displayed student created posters illustrating personalized definitions to social skills vocabulary (e.g., Caring: I do not hurt anyone or anything on the inside or out). Selected symbols were printed from software packages (e.g., symbolstix.com and picxwriter.com) and added to each poster to support students functioning at lower cognitive levels. Marnie, Rebecca, Sarah, and Anna each displayed visuals (text with English and Spanish translations accompanied by pictures) to support writing and reading instruction (e.g., Confirm that your writing has all of the following: Words that are capitalized correctly; Words that make your writing interesting and fun to read; Words that are spelled correctly; Paragraphs that are indented).

All five teachers used general decorative and informative displays such as posters of celebrities/athletes and characteristic traits. For example, Lee posted a display titled "Perseverance: If at first you don't succeed, you're in good company"

which included photos with accompanying captions of several U. S. Presidents (e.g., Harry Truman opened a hat shop at age 35 that went bankrupt in two years. He worked 15 years to pay that debt.).

Student belonging and grouping strategies. The component of grouping strategies encompassed ways that teachers plan for fostering student belonging and the delivery of instruction to enhance student achievement. Researcher observations revealed that grouping arrangements were planned for in multiple ways. Marnie and Anna orchestrated class meetings. Four teachers engaged in co-teaching arrangements (e.g., Lee and a paraeducator co-taught reading groups; Marnie co-taught a social skills group with a psychologist and Rebecca and Sarah co-taught with their general education colleagues). Four teachers incorporated some aspect of cooperative learning arrangements. Anna developed a student self-assessment form, “My Learning is on Track” with symbols that mirrored the school’s positive behavior intervention system. Prompts required students to include a word, phrase or picture associated with each prompt “what”, “how”, and “why”.

Materials. The component of instructional materials included specific materials that teachers selected due to the different ethnic/ cultural, linguistic, ability levels, learning styles and/or interests of the students. Lee and Rebecca relied heavily on the use of visuals to support content instructions such as photographs of the local community. Every teacher depended on multiple commercial materials, real-life and multisensory resources such as flashcards, foam puzzles, letter tracing cards, pencil grips, math manipulatives, software, videos, assistive technology, and art supplies. Given that Sarah co-taught each day in three different general education classes, she experimented with wheeling a cart containing assorted math manipulatives (number lines, fraction cards, dice, counting cubes, calculators). Four teachers used supplemental texts at varied reading levels, heavy with visuals and in languages other than English.

Professional development. The teachers’ professional development goals were reflective of the realities of the job. For example, all five teachers expressed a commitment to meet the challenges of collaboration. Marnie remarked, “We discussed co-teaching in our preparation program and while co-planning and duet teaching made sense, it was a challenge to make it happen.” Sarah described her challenges with collaboration, “I knew that my ninth graders needed accommodations, but the algebra teacher never had time and I felt like a visitor in the language arts teacher’s room.” Three teachers articulated a need to improve their skills in

implementing cooperative learning arrangements in an effort to more meaningfully include students. Rebecca and Lee pledged commitments related to enhanced use of community resources, family involvement, student relationships, paperwork efficiency, accommodations, and personalized environmental print. Anna mentioned that she knew she needed to do more to help individual students feel as though they belong. Speaking about one youngster, she noted, “Things would be so much better if I could just find him a friend and support him in keeping that friendship.” Two different teachers each vowed to continue their professional growth by completing advanced educational training and learning a new language. Four teachers identified planning and time management as areas warranting attention. Marnie noted, “I have to be more focused with my planning efforts. Sometimes I over-planned and other times I under-planned. I didn’t leave the lesson feeling like I nailed-it.”

Limitations

Findings in this article are based on narrative response and observation data collected from novice special education teachers. As with any study, the researchers must acknowledge limitations. This study is conditioned by three primary limitations. First, this study solely relies on self-reports from monthly prompts and limited classroom observations. Thus, the researchers can only draw conclusions about what the teachers reported as their beliefs and practices with supported yet limited observational data, not about actual family interaction, team involvement, and student results. The next limitation pertains to the focus of the investigation. This study is a benchmark for tracking novice teacher preparation in inclusive, culturally response practices, and reflective prompts were designed to align with a preexisting observation guide hence, the scope of prompts and focused observation were limited. Last, this research was limited to using a purposeful sample: five novice special educators, all from the same teacher preparation program. Contextual factors may impact findings under otherwise similar circumstances.

Discussion

After a year of teaching on their own, the five novice special education teachers were able to clearly articulate exemplars of their pedagogy and ways they needed to continue to grow and in order to be effective in delivering inclusive, culturally responsive instruction. The world of a novice special education teacher is a busy one allowing little time to process all

that is simultaneously happening. Sarah shared that she was left with the questions, “What is inclusion? As the pendulum swings, how can students be truly included?” Garcia et al (2010) maintain, “Practicing teachers must be given opportunities to explore and comprehend their own cultural and personal values, their identities, and their social beliefs” (p. 136). Noting disconnects between practices such as school-wide visuals and how those link to students’ cultural perspectives and real-world experiences appeared to be an eye-opening insight for Rebecca as revealed in her question, “Do students from other countries even know who those celebrities are?”

This study provided recommended reflective opportunity by focusing teacher attention on explicit aspects of best practices that illustrate a balance between the demands of the job and action on their commitments. Teachers noted they relied on teacher-made visuals and materials that reflected the abilities, ages, learning styles, interests, and cultural backgrounds of their students. Furthermore, while no precise script for inclusive, culturally responsive practices exists, the novice teachers appeared to embrace each student as a whole child as demonstrated by their efforts at individualizing and accommodating for academic needs (e.g., advance organizers, varied texts), supporting social-emotional development (e.g., positive behavior support planning, friendship groups), and family involvement (e.g., back and forth communications). Clearly, focus work must continue as teachers such as Sarah ponder how to truly ensure students are included. These novice teachers acknowledged commitments to learn a new language, seek out advanced training, better manage their planning, and deepen their use of community resources, family involvement and student relationships illustrates their appreciation that teacher preparation was only the beginning in their journey to be an effective, culturally response special educator.

The knowledge and insights gained from what novice special education teachers say about their pedagogical knowledge and how those skills are realized in their classrooms provide teacher educators with insight into ways they can improve teacher preparation both on-campus and field supervisory work. For the authors, they are more able to explicitly discuss and readily share ways theory informs practice in teacher preparation courses and during coaching work with teacher candidates. If preservice special education students are to ultimately lead efforts that incorporate diverse points of view and work against discrimination of all kinds in their classroom, teacher educators must look closely as how they are teaching and modeling those practices. As a result of this

investigation, more explicit attention to the complexities of collaboration, co-teaching practices, and the implementation of cooperative learning arrangements have been infused into methods and internship courses and practical examples of efficient paperwork management are covered in a seminar course.

The practices of the novice special education teachers profiled here illustrate both commendable efforts grounded in evidence-based practices and room for growth. These are novice educators with confidence and a year of experience, who appear well postured to assume roles of deepened impact. While each of the novice teachers acknowledge a commitment to inclusive, culturally responsive practice, they all understandably appear to be in “survival mode”. As confidence and experiences intensify, it is hoped that claimed commitments will be realized by taking on more ownership that makes a difference in the lives of students with diverse needs and from diverse backgrounds. In this article, the authors offer a glimpse into how focused observations and reflective prompts have provided direction to the evaluation of teacher skill while simultaneously affording structured opportunities to examine ones beliefs and the connection between those beliefs and recommended best practices.

Conclusion

This study responds to the call for research into the interconnected school related activities and the tensions associated with inclusive, culturally responsive teaching practices. Such investigations help to illuminate how teacher educators might scrutinize their own contextual and instructional practices. When teacher educators candidly share their thinking and rationale for instructional decisions, they make transparent to students their ways of knowing. It is during these times that educators maximize the chance to explicitly reveal the ways research informs teaching. Teacher educators have the stage to model the best of instruction. They must seize those teaching opportunities and put inclusive, culturally responsive practices at the forefront to ensure all educators are providing effective instruction to every student.

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Therapeutic Horseback Riding and Children with Autism Spectrum Disorders

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Abstract

Recent research indicates that Therapeutic Horseback Riding (THR), as a part of animal-assisted therapy, yields several positive results. THR is an intervention utilizing horses to improve behaviors of individuals with disabilities. The current study attempted to add to the research regarding THR effectiveness on children with Autism Spectrum Disorders (ASDs) by evaluating an existing program with the use of a standardized assessment. Forty-five children diagnosed with ASDs (ages 10–14 years) participated in the study. It was hypothesized that participants in the experimental group (n = 23), compared to those on the control group (n = 22), would demonstrate significant improvement on subscales of Stereotyped Behaviors, Communication, Social Interaction, and overall Autism Index following a 12-weeks THR intervention. The results indicated that children in the experimental group presented reduction in stereotyped behaviors, and improvements in communication and social interaction domains. The results of this study suggest that THR may be an effective therapeutic option for children with ASDs.

Autism spectrum disorders (ASDs) are neurodevelopmental disorders manifested by individuals who display communication impairments, social relatedness difficulties, and behavioral excesses (*DSM-IV-TR*; American Psychiatric Association [APA], 2000). ASDs interfere with the normal development of the brain in the areas of social interaction and communication skills. Children and adults with ASDs typically have difficulties in verbal and non-verbal communication, social interactions, and leisure or play activities. The disorder makes it challenging for them to communicate with others and relate to the outside world. Students with ASDs may use repeated body movements (hand flapping, rocking), unusual responses to people or attachments to objects, and they may resist changes in routines. ASDs are a continuum of complex, heterogeneous etiologies embodying different levels of intelligence as well as forms and severity of symptoms. One end of the spectrum represents individuals who are diagnosed with high functioning autism. Individuals with high functioning autism have average or above average intelligence and they display sophisticated forms and levels of verbal communication. The other end of the spectrum characterizes individuals who display the overall symptoms of ASDs, but whose intelligence is below the average and have more limited language and communication abilities. Today, ASD is one of the most common developmental disabilities (Newschaffer et al., 2007). The most recent prevalence rates suggest that one in 68 children will be diagnosed

with an ASD (Centers for Disease Control & Prevention, 2014). With the increase in prevalence of ASD and research findings elucidating the causes, characteristics, and effective interventions, educators are continually challenged to know and apply the latest research findings to help students with ASDs.

In recent years, increased focus has been placed on the use of evidence-based interventions for students with ASDs (National Research Council, 2001; Simpson, 2005). It is becoming increasingly evident that there is no single best-suited universal effective intervention for all individuals with ASDs—as a result, increased multidisciplinary research is being conducted on ASDs subtype characteristics that help to predict positive responses to intervention (Stoelb et al., 2004). Recent attention has focused on animal-assisted therapy as a therapeutic option to improve the symptoms associated with ASDs (Fine, 2006; Martin & Farnum, 2002). Specifically, these symptoms are related to improvement in social interaction and reduction in problematic behaviors. Animal-assisted therapy, defined as using animals within a goal oriented setting to implement intervention, has been shown to significantly benefit cognitive, psychological, and social domains (Fine, 2006). It is possible that animal-assisted therapy provides a multisensory environment that will improve behavioral challenges and profound social and communication deficits for students with ASDs (Katcher & Wilkins, 2000; Rud & Beck, 2000). Studies also suggest that animal-assisted therapy influences physiological

factors such as lowered blood pressure, heart rate, and decreased anxiety levels (Morrison, 2007).

Studies of Animal-Assisted Therapy

With respect to the use of animal-assisted therapy in programs designed for students with ASDs, Redefer and Goodman (1989) found that children with ASDs demonstrated fewer stereotyped behaviors such as hand-posturing and humming, and increased socially appropriate behavior such as joining the therapist in simple games, when a friendly therapy dog was introduced into the sessions. The children's behavior remained almost three standard deviations above baseline levels one month after the introduction of the therapy dog, even when the dog was not present. Martin and Farnum (2002) found that children with ASDs demonstrated a more playful mood, greater focus, and greater awareness of their social environments when in the presence of a live dog than when in the presence of a stuffed dog or a nonsocial toy (e.g., a ball). Another study by Sams, Fortney, and Willenbring (2006), investigated the effects of occupational therapy by incorporating animals versus standard occupational therapy techniques. Sams and colleagues (2006) hypothesized that the animal integrated therapy would elicit more social interaction and language use. Their sample consisted of 22 children ranging in age from seven to 13 years, all diagnosed with ASDs. Over the course of 15 weeks, participants took part in two weekly occupational therapy sessions, one with an animal present, and one without. Activities targeted sensory integration, language use, sensory skills, and motor skills. The results indicated that children engaged in significantly greater use of language and social interaction during the animal occupational therapy relative to the standard occupational therapy. Sams and colleagues (2006) argued that the live-animal-therapy should be an established occupational intervention for children diagnosed with ASDs.

Therapeutic Horseback Riding (THR), a subtype of animal-assisted activities, has also been used to help students with ASDs. Two types of horseback riding interventions are described in the literature: THR and hippotherapy. Many times the terms hippotherapy and THR are used interchangeably when they are actually two different intervention strategies. Hippotherapy is an intervention strategy conducted by a therapist (e.g., occupational therapist, physical therapist, or speech language pathologist) using the movement of the horse to achieve therapy goals, while THR is a method of riding where the instructor takes into account a person's physical, mental, and emotional strengths and

needs. THR is defined as using horseback riding intervention to improve posture, balance, and mobility while developing a therapeutic bond between the student and horse (All, Loving, & Crane, 1999). Therapeutic riding is recreational horseback riding lessons adapted to individuals with disabilities. THR aims to enhance physical, psychosocial, and cognitive functioning for individuals with disabilities and is conducted by a riding instructor along with volunteers or teachers. In THR, the individual is often taught riding lessons in a group format, which run in "sessions." The instructor must respond to the group as a whole, in addition to fostering individual success. There is occasional hands-on assistance by the riding instructor and/or volunteers, but the instructor usually teaches from the center of the arena. Horses used for therapeutic riding instruction have been screened to make sure they have the appropriate temperament for the job. In therapeutic riding, the emphasis is on proper riding position and rein skills, not functional therapeutic goals. THR stimulates multiple domains of functioning and may be especially suited for children with ASDs who frequently present with a combination of motor, cognitive, and social disabilities. At this time, the underlying theory for why THR has been beneficial appears to rely on both physiological and environmental factors (Macaulay & Gutierrez, 2004). Riding on the horse is believed to help an individual develop an awareness of body movement, weight distribution, improved hand-eye coordination, improved speech, a wider tactile experience, and a wider experience of sounds (Macaulay & Gutierrez, 2004).

Despite a substantial body of case reports and descriptive studies on the benefits of THR specific to children with ASDs, research evidence is sparse. Recently, Bass, Duchowny, and Llabre (2009) studied the effect of THR on social functioning in children with ASDs. Compared to the participants in the waiting-list control group, participants in the experimental group showed greater improvements in sensory integration, directed attention, social motivation, and sensory sensitivity as well as less inattention and distractibility. Sams and colleagues (2006) compared language use and social interaction in children with ASDs receiving occupational therapy using either standard techniques or incorporating animals. Twenty-two children received both forms of therapy. The results suggest that the children demonstrated significantly greater use of language and social interaction in sessions incorporating animals when compared to sessions using exclusively standard occupational therapy techniques. In general, Sams and colleagues (2006) demonstrate a need for occupational

therapy methods that utilize animals, in which the horse can be specifically used to facilitate improvement on multiple areas during therapy interventions. In conclusion, THR could be a relevant intervention for children with ASDs.

Purposes of the Study

While THR is currently being utilized as a therapeutic intervention in hundreds of programs in the United States and throughout the world (Auxter, Pyfer, & Huettig, 2005), only a limited amount of research has been conducted to assess the therapeutic effectiveness of horseback riding for children with disabilities. Specifically, very few experimental studies investigate the effect of using THR in children with ASDs. Additionally, much of the research that had been completed has not been published in peer-reviewed journals, and there is a lack of consistency in terminology as well as the actual intervention used. Given that recent developmental research suggests that both typically developing children (Melson, 2003) and children with ASDs (Martin & Farnum, 2002) exhibit a natural interest toward animals, it is necessary to explore this field of research with further experimental studies.

This current study attempted to add to the research regarding THR effectiveness on children with ASDs by evaluating an existing program with the use of a standardized assessment, which was lacking in previous research. Both overall effect on ASDs symptoms and effects on specific areas of functioning (stereotyped behaviors, communication, and social interaction) were evaluated. We hypothesized that the participants would display less autism associated behaviors post-intervention.

Method

Participants

Forty-five children diagnosed with ASDs participated in the study. The experimental group consisted of seven girls and 16 boys ranging from ten to 13 years of age ($M = 11.75$, $SD = 1.08$), while the control group consisted of eight girls and 14 boys ranging from ten to 14 years age ($M = 11.91$, $SD = 1.38$). The Nonverbal Intelligence Quotients (NIQs) (Brown, Sherberson, & Johnsen, 1982) for the experimental group ranging from 80 to 97 ($M = 88.87$, $SD = 5.59$), while the NIQs for the control group ranging from 79 to 101 ($M = 90.09$, $SD = 6.86$). All participants met criteria for DSM-IV-TR (American Psychiatric Association, 2000) autism spectrum

diagnosis. The teachers' checklists indicated that the majority of the participants often exhibited behavior problems including screaming, hitting, throwing tantrums, rocking back and forth, and flapping their hands. In addition, participants had difficulty in social engagement, may have failed to respond to their names, and often avoided eye contact with other people.

Participants were recruited from a center specializing in diagnosing and providing services for students with ASDs in Jordan, Amman. A team of professionals provided an individualized autism specific learning program. The staff included special education teachers, speech pathologists, psychologists, and occupational therapists. The team administered the tests individually for each student. All assessments were undertaken to identify the student's learning profiles and areas for skill development. A documented program was developed in consultation with the family covering the following areas: behavioral skills, communication skills, cognitive skills, motor skills, social skills, play, independence skills, and school readiness. Students were provided with specialized training for up to 40 hours per week. Parents in the experimental group had to consent to pre-testing, 12 weeks of THR at Horseback Riding Training Center in Amman, and one post-testing session. Selected participants had no previous exposure to THR activities.

Procedure

In terms of participants' recruitment, the Higher Council for the Affairs of Persons with Disabilities in Jordan provided the researchers with all descriptive information for special-education centers that served students with ASDs in Amman, Jordan. Special-education centers were approached and permission was sought from one center's principal that had an appropriate number of students with ASDs to conduct the study. The researchers explained the purpose of the study for teachers and asked them to encourage the parents to be part of the study. In addition, phone calls were made to the parents to present the study. The parents were assured that the study was for scientific purposes only and that their responses were confidential and anonymous. Then an informed consent process provided potential participants with explanations of confidentiality, purposes, and uses of the research were sent to the parents. If parents consented to participate, they received the pretest. After intervention ended, parents completed the posttest again for comparison.

Four horseback riding specialists completed a 16 hours training course about children with ASDs in order to be part of the study. In addition, ten graduate students (majoring in special education) provided voluntary work to facilitate the study, also attending the 16 hours training. Furthermore, the second author was on site to help and oversee the intervention process. Each child received a therapeutic riding session for one hour per week over a span of 12 weeks. Two sessions had to be rescheduled because of poor weather conditions and school holidays.

Instrumentation

We used the Gilliam Autism Rating Scale-2 (GARS-2, 2006) as the instrument to measure the performance of the 45 participants before and after the THR intervention. The GARS-2 is a 42-item, norm-referenced instrument developed to identify individuals with autism ages three to 22 years. Although the GARS-2 is described as a screening test, its purposes extend to diagnosis, intervention planning, and progress monitoring. According to the GARS-2 manual, the assessment may be completed by a teacher, parent, or other caregiver who has knowledge of, and regular contact with the individual being evaluated. The estimated time of administration is five to ten minutes. The main section of the GARS-2 is divided into three subscales-Stereotyped Behaviors, Communication, and Social Interaction-which are based upon the Autism Society of America's definition of autism and diagnostic criteria from the DSM-IV (American Psychiatric Association, 2000). Each subscale contains 14 items and is scored on the frequency of occurrence from zero (never observed) to three (frequently observed). Each subscale generates a standard score (mean = 10, SD = 3) with a corresponding percentile rank. The subscale standard scores are then summed to produce an Autism Index (mean = 100, SD = 15). Higher standard scores and Autism Indices are indicative of more problematic behavior.

The GARS-2 was researched and standardized with a sample of 1,107 individuals that represented the 2000 Census data of the United States. The subscales are all norm-referenced. The coefficients of internal reliability were .84 for the Stereotyped Behaviors subscale, .86 for Communication, .88 for Social Interaction, and .94 for the total test. Test-retest reliability estimates ranged from .64 for Communication to .82 for Social Interaction, .83 for Stereotyped Behaviors, and .84 for the Autism Index. The manual provides substantial evidence for content validity (using a variety of techniques including item

discrimination coefficients ranging from .35 to .64), criterion-related validity, and construct-identification validity. The GARS-2 is an instrument that can discriminate persons with autism from other individuals with severe behavioral disorders based on the validity studies discussed in the manual. In addition, GARS-2 has been demonstrated to be reliable and valid across different gender, racial, age, and language groups (Al Jabery, 2008; Diken, Gilliam, Ardic, Diken, & Sweeney, 2012; Tafiadis, Loli, Tsanousa, & Tafiadi, 2008). For example, Al Jabery (2008) examined the validity and reliability of Jordanian translated Arabic version of the GARS-2 with 100 students aged from three to 13 years. Results indicated that the Arabic GARS-2 is a valid and reliable measure for identifying students with autism.

Therapeutic Horseback Riding Intervention

This intervention was adapted from the work of Bass and colleagues (2009). In this intervention, the trained instructors assisted the students in mounting and dismounting their program horse. These processes were verbalized to participants using step-by step instructions. The mounting/dismounting segment of the program lasted five minutes and was aimed at stimulating verbal communication and vestibular processing. After successfully mounting the horse, the participants performed ten minutes of warm-up exercises to stretch their bodies in preparation for the riding class. The participants routinely performed a series of the following exercises: arm circles (forward and backward), trunk twists, opposite toe touches and two-point. Through the direction of the riding instructors, the trained side walkers provided the riders verbal, modeling and/or physical prompts as needed to assist them in acquisition of these exercises. These exercises were designed to condition the participant for the physical demands of the intervention.

The students participated in 15 minutes of riding skills each session, which were specifically designed to stimulate sensory seeking, as well as gross and fine motor domains. Participants were instructed to perform the following skills: direct rein, open guided rein, two-point, and use of proper riding aids (leg, seat, hand and voice), upward and downward transitions (halt/walk/trot, trot/walk/halt), as well as posting at the walk and trot. These activities were designed to target balance and coordination. Once participants had learned to walk, trot, and halt on their horse, they were asked to verbalize the command at the same time. For those participants who were nonverbal, the instructor and volunteers prompted participants to use basic sign language in order to indicate they understood the

command, that is, place hands side-by-side, palms down, and move each hand up and down to request the horse to walk forward.

The next segment of the therapeutic riding session lasted for approximately 20 minutes and focused on individualized and group games while on the horse. The games were led by the instructors and focused on social and communication skills. Examples of games included catch and throw and letter games. These activities were selected because they targeted different aspects of verbal communication. For example, the letter games promoted social verbalization and also gave non-verbal participants the opportunity to expand their skills by working toward sounding out the letters. For the non-verbal participants, the instructor would place the participant's hand on their throat while saying each letter, so that they could feel the vibration of the sound. They would then say a word that began with that letter so that participants could simultaneously increase their vocabulary. Nonverbal participants were also encouraged to draw the letter in the air. These exercises sought to target participants' communication skills and gross/fine motor coordination.

During the last part of the session, participants took part in grooming activities. Children learned how to properly groom and care for their horse by learning to identify grooming tools (curry comb, hoof pick, body brush, mane/tail comb, face brush, etc.) and bathing tools (sponge, water, shampoo, bucket, sweat scraper, etc.). Finally, throughout each of the one-hour sessions, participants were verbally and physically reinforced (for example, with high-fives and hugs) upon completion of each exercise. Parents and teachers were asked about the best mode of reinforcement for each student with ASDs to facilitate skill acquisition in the training. In general, these reinforces impact the students with ASDs ability to mimic or imitate target behaviors such as greeting other children and instructors. Instructors and volunteers made efforts to maintain eye contact with all participants throughout the therapy session.

Study Design

The pre-test-post-test control group design was used in this study. Two groups (experimental group and control group) were formed by random assignment; both groups were administered a pre-test, each group received a different intervention, and both groups were given a post-test at the end of the study. Post-test scores were compared to determine the effectiveness of the intervention. The combination of random assignment and the presence of a pre-test and

a control group served to control for internal validity. There are a number of ways in which the data from this experimental design can be analyzed to test the research hypothesis regarding the effectiveness of the intervention. However, the best way to analyze these data is to compare the post-test scores of the two intervention groups. The pre-test is used to see if the groups are essentially the same on the dependent variable at the beginning of the study. If they are, post-test scores can be directly compared using a statistic called the *t* test. The THR intervention was the independent variable for the study. The dependent variables targeted during this study were the participants' scores on GARS-2 assessment. Statistical Package for the Social Sciences (SPSS 17.0) was used to analyze the data.

Treatment Integrity

In order to provide quantification of the intervention condition, a checklist was developed to assess treatment integrity during the intervention condition. These checklists were based on the critical components of the selected intervention. Each step on the checklist was scored as completed or not completed, and the percentage of steps completed accurately was determined. A total of 50% of the 12 sessions were randomly selected to examine the fidelity of the intervention. While the instructors implemented the intervention, four observers (the graduate students) independently and simultaneously conducted treatment integrity assessments. The average interobserver reliability was 98% (range 97%–100%). In addition, research team had weekly updates and discussions to address the crucial points in the delivery of the intervention and provide feedback.

Results

Figures 1 and 2 display the mean performance on GARS-2 for experimental group and control group before and after applying the intervention. Figure 1 indicates that children with ASDs in both groups are presenting comparable performance before applying the intervention. On the other hand, Figure 2 indicates differences between the two groups in favor of children with ASDs in the experimental group in the three subscales of GARS-2 and the Autism Index. As discussed previously, higher standard scores and Autism Indices are indicative of more problematic behavior. In general, children with ASDs in the experimental group present reduction in stereotyped behaviors, improvements in communication and social interaction, and drop in autistic behaviors as

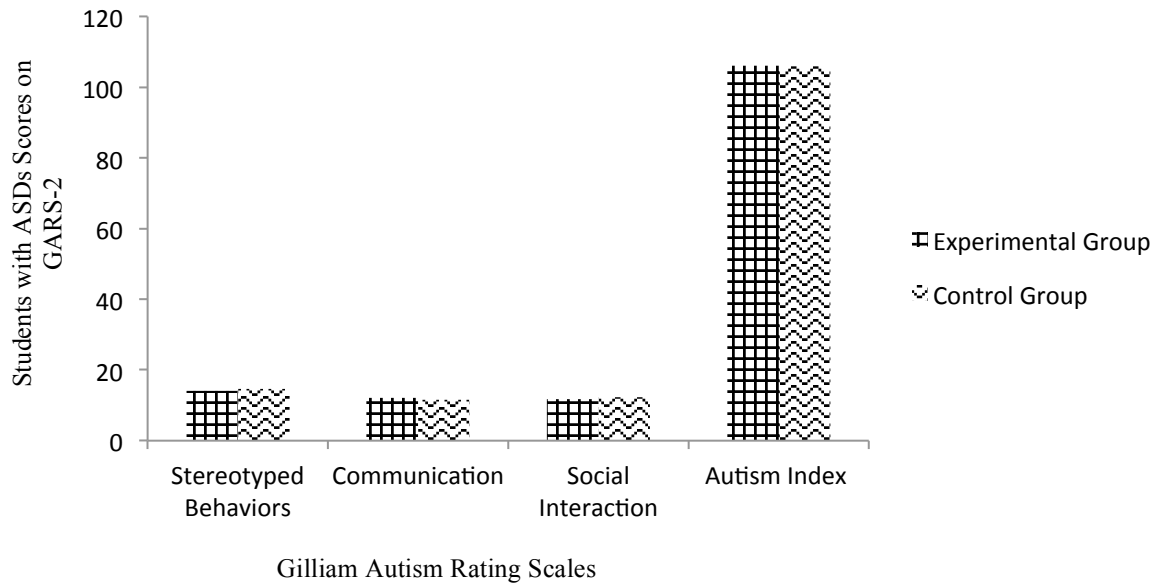


Figure 1. Mean performance on Gilliam Autism Rating Scale-2 for experimental group and control group before applying the intervention.

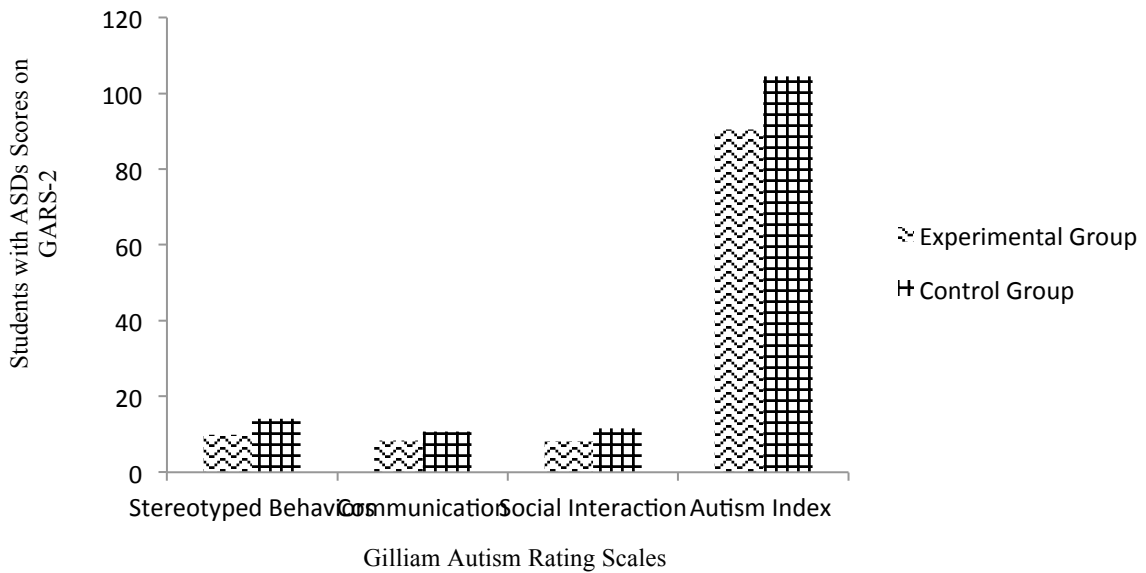


Figure 2. Mean performance on Gilliam Autism Rating Scale-2 for experimental group and control group after applying the intervention.

represented by the Autism Index. A closer analysis of these preliminary results is presented in the following sections.

The Groups' Differences

To assure that there were no violations of assumptions in independent *t*-test, Levene's tests were

administered to the scores of Stereotyped Behaviors subtest, Communication subtest, Social Interaction subtest, and Autism Index for both groups before applying the intervention to the experimental group. No violations of normality and homogeneity of variance were detected. The summary of independent *t*-tests that were conducted to find out the differences between the study groups in GARS-2 variables before

applying the intervention is presented in Table 1. The data in the table indicate that the differences between all pairs of means for both control and experimental groups not statistically significant.

In addition, to examine the effect of the THR intervention, other independent *t*-tests were performed to the scores of all subtests and Autism Index for both groups by the end of the intervention. All assumptions of performing independent *t*-tests were examined. No violations of normality and homogeneity of variance were detected as well. In general, the results indicated significant differences between the two study groups in favor of experimental group in all study variables (see Table 2).

Discussion

This study provides preliminary evidence that a 12-week THR intervention with children diagnosed with ASDs can result in significant improvements. Specifically, participants in the THR intervention group made significant improvements compared to the ones in the control group on subscales of Stereotyped Behaviors, Communication, Social Interaction, and overall Autism Index. Over the course of the study, we observed that children in the experimental group learned and practiced appropriate social skills, such as greeting people, making eye contact, waiting for a turn, and listening while others are speaking. Furthermore, children in the experimental group increased their vocabularies, expanded their sentence length, demonstrated a sustained level of directed attention and focus that is not usually seen in children with ASDs. These observations were confirmed by the results of the study's instrument (GARS-2) when was administered at the end of the intervention.

The results of this study suggest that THR may be an effective therapeutic option for children with ASDs. Positive effects on social interaction in children with ASDs were also reported by Bass et al. (2009), after children completed a 12-week THR program. The observed increase in social interaction may be attributed to a variety of factors. It is possible that exposure to the horse was simply stimulating. The multisensory nature of the THR may have been a stimulating event that was directly associated either with the physical presence or with the natural movement of the horse. The act of riding the horse may have been perceived as a rewarding stimulus that accounted for higher levels of motivation and social engagement. The increased expressive communication behaviors observed in this study were expected as well, and may have been influenced by the human-horse interaction engaging and motivating experience

inherent in the THR intervention. For example, if the child says "Walk on", the horse responds. Volunteer handlers, who were present during the THR intervention to ensure the safety of the horse and rider, added to the social-communication experience of the THR intervention. In this study, the THR instructors routinely encouraged participants to verbalize instructions to their horses, which might help explain the observed improvements in expressive language.

In addition, it seems that several activities (e.g., letter games) implemented in the intervention improved the social and verbal skills among students with ASDs. In terms of the reduction in the problematic behaviors, it is possible that the highly structured intervention captivated their attention and elicited a sustained level of focus. It is also possible that the horse, a perceived novel stimulus, may have encouraged participants to break away from their previous sedentary routines. Williams (2004) suggests that the child will translate caring for the animal into caring for self. Conversation and socialization are stimulated through interaction with the animal. Self-esteem may be increased through a new found ability to positively influence another being. In addition, being able to identify self with a powerful horse gives the child an increased sense of his/her own self (Bates, 2002). When the horse responds to request when being led or ridden, the horse subordinates power to the child the therapist can observe, comment and instruct the child in effective development of communication skills, both verbal and non-verbal (Katcher & Wilkins, 1998; Mallon, 1992).

Finally, it is worth mentioning that THR intervention was a new experience for many students with ASDs and their families in this study. One of the parents stated that "THR intervention change our life". Lifestyles of physical activity (e.g., THR) are shaped in part within the school setting and in part within home (Auxter et al., 2005). The family unit provides the primary social learning environment for the child with ASDs. When family members support and cooperate with teachers, participation in physical activity is reinforced. Effective collaboration of schools and families to facilitate physical active leisure lifestyles for students with ASDs involves a blend of convenience, acceptability of information sent to the home, home-based curricula, and family learning opportunities. When these factors are controlled, the vast majority of families participate with the school to enhance their child's well-being.

Table 1

Differences between the Study Groups in GARS-2 Variables before Applying the Intervention

| GARS-2 Variable | Group | M | SD | P | <i>t</i> |
|-----------------------|--------------|--------|------|-------|----------|
| Stereotyped Behaviors | Control | 14.64 | 2.32 | 0.471 | -.728 |
| | Experimental | 14.13 | 2.34 | | |
| Communication | Control | 11.59 | 2.21 | 0.368 | .910 |
| | Experimental | 12.17 | 2.08 | | |
| Social Interaction | Control | 12.23 | 2.22 | .475 | -.720 |
| | Experimental | 11.74 | 2.32 | | |
| Autism Index | Control | 105.86 | 6.22 | .514 | .090 |
| | Experimental | 106.04 | 7.18 | | |

Note: n = 22 for control group, n = 23 for experimental group, GARS-2 = Gilliam Autism Rating Scale-2, M = Mean, SD = Standard Deviation, p = Significance Level, *t* = independent *t*-test.

Table 2

Differences between the Study Groups in GARS-2 Variables after Applying the Intervention

| GARS-2 Variable | Group | M | SD | P | <i>t</i> | <i>r</i> |
|-----------------------|--------------|--------|------|--------|----------|----------|
| Stereotyped Behaviors | Control | 14.09 | 2.36 | 0.0001 | -5.708 | .65 |
| | Experimental | 9.87 | 2.58 | | | |
| Communication | Control | 10.82 | 2.06 | 0.0001 | -3.785 | .49 |
| | Experimental | 8.39 | 2.23 | | | |
| Social Interaction | Control | 11.55 | 2.23 | 0.0001 | -5.673 | .65 |
| | Experimental | 8.17 | 1.74 | | | |
| Autism Index | Control | 104.45 | 5.80 | 0.0001 | -8.566 | .63 |
| | Experimental | 90.52 | 5.09 | | | |

Note: n = 22 for control group, n = 23 for experimental group, GARS-2 = Gilliam Autism Rating Scale-2, M = Mean, SD = Standard Deviation, p = Significance Level, *t* = independent *t*-test, *r* = Effect Size.

Future Research and Limitations

This study shows there may be a possibility for positive behavior change in children with ASDs through participating in a THR intervention. This kind of research should continue to fully explore THR variables and children with ASDs characteristics. Future studies should increase the length and number of sessions in order to test whether a more intense form of intervention would result in greater reduction in autistic behaviors. Results could be applied to a better training in THR intervention that fits the specific needs of children with ASDs. In addition, a more comprehensive assessment would be useful in understanding how intervention is directly affecting specific domains of autistic behaviors or symptoms.

Furthermore, additional research also needs to be conducted to measure the cost of using THR intervention as alternatives or supplements for more traditional forms of intervention.

Although the findings reported in this study are promising, this study had some important limitations. Most noticeably, we do not know how many children were on medication, and if so, what kind and/or how much medication they were receiving throughout the intervention. It was also unknown if parents of participants in either the experimental and control groups were taking part in any therapy or self-help classes. As a result, we could not control for these variable which may have acted as confounds. In addition, given that parents completed the instrument, this study measured their expectations and

observations. More specifically, parents might be more subjective in scoring ASDs symptoms and could be more inclined to report an intervention effect than teachers or instructors because they want to see improvement in their child. Although reliance on parent report is in some ways a limitation, parents do have the advantage of observing the child's behavior in diverse environments.

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Learning Disabilities Programs at Jordanian Public Schools: Critical Look at Reality and Future Aspirations

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Abstract

The purpose of this paper is to review and assess the Jordanian educational system and its provision of programs for students with learning disabilities (LD) in public schools. The author will document how these programs developed and how they currently address student needs. Issues related to current assessment practices, the role of resource room teachers, and challenges facing the inclusion of students with LD in programs are discussed. Results of the review and assessment revealed that programs offered to students with LD were still facing a variety of challenges. Among these are the lack of qualified teachers, appropriate finances, and lack of materials and equipment necessary to provide a "first class" education. Recommendations are made for teachers, other service providers, and policy makers to consider in developing critical components of successful special and inclusive education programs for students with LD.

The Hashemite Kingdom of Jordan is a newly established country that is located in the heart of the Middle East. In 2011, it was estimated that six million people lived in the country (Department of Statistics, 2011). Of this number, 42.2% represented young people under the age of 14 and 31% were between 15 and 29 years old. About 89% of Jordanians are literate (Amr, 2011; Melhem & Isa, 2013). As a developing country, Jordan lacks natural and economic resources. For decades, the country has depended on external aid, particularly from Western and Arabic Gulf Countries. The constant conflict in the Middle East and a large number of refugees escaping to Jordan has resulted in the country investing in human capital more than economic resources (Amr, 2011).

The Jordanian Educational System

The Jordanian educational system, in comparison to other countries, is relatively new. General education principles in Jordan are derived from Islamic values. These principles are contained in the Jordanian Constitution. Under the principle of 'Everyone has a right to a free and public education', the educational services are provided to every student equally and without any discrimination in the Kingdom (Melhem & Isa, 2013).

The educational system in Jordan comprises of three different stages. These include instruction at the kindergarten, primary, and secondary levels. Kindergarten serves the educational needs of children under six years of age. Primary school provides education for students in first to tenth grades (ages six to 16 years). Finally, students who attend high schools do so via a secondary-first or a secondary-second tract.

The education in kindergarten is free and optional, while primary education is free and compulsory for all students. Secondary education consists of two academic years for students aged between 16 and 18 years who completed the basic stage (ten years) and includes two main paths. Students electing to pursue the first path will, at the end of a two-year period, advance to the general secondary exam, 'Tawjihi', and upon passing it receive a certificate of guidelines from high school, which qualifies them for admission to universities. The second path, the professional secondary education, provides intensive vocational training and apprenticeships, which leads to 'Tawjihi' certification. This track allows students to qualify for a vocational or technical path to university education or the job market (Al-zyoud, 2011; Amr, 2011; Melhem & Isa, 2013).

The present structure of the Jordanian educational system comprises public and private schools. Both sectors are mainly controlled by the Ministry of Education (MOE). In 2012, there were a total of 6181 schools providing both primary and secondary education across the Kingdom. The total number of students who studied in public and private schools were 1,690, 172 in both general and special education (Al shoura & Ahmad, 2014; MOE, 2012). The MOE is responsible for both the public and private education systems. For the public school system, the MOE assumes a much broader set of roles, similar to those in other Arab countries. It builds the infrastructure, hires staff, identifies the educational standards, creates curricula, provides required materials and support, establishes training programs for teachers, coordinates a variety of educationally pertinent activities, and ensures adequate programs in schools are operating.

The relationship between the MOE and the private sector is generally in terms of designing the overall framework, setting standards, and offering guidelines, besides licensing and supervision. The ministry ensures the fundamental needs for the physical components of private schools are met and that a sound educational program is provided to students. Both the public and private schools follow the same calendar, as many Arab countries. The curriculum in private schools, often influenced by the educational curricula from Western countries like the United States, is different from that of public schools. Private sector schools seem to provide better services but these are usually very expensive. Nevertheless, according to Melhem and Isa (2013), the Jordanian government uses only about 12% of its budget for general education.

Jordan's Ministry of Education as a Main Provider of Educational Services and Supports Related to Students with Learning Disabilities

The MOE is fully responsible for providing free and appropriate education for all students, including those with LD (Al shoura & Ahmad, 2014). The educational services for students with LD were started in the 1990s. These services are provided to students via resource rooms, which now number 831 across the Kingdom, since their inception. According to the MOE (2012), about 16,360 students were receiving services in these rooms. Because the MOE is responsible for providing facilities and supports for a conducive learning environment, it engages in consistent practices to create new resource-rooms and equip them with appropriate educational materials and assistive technology necessary for students with LD (MOE, 2010).

The MOE has staff at the upper ministry level and in each of the educational directorates who are involved in supporting the special education needs for students with LD across the Kingdom. Pedagogical psychologists and speech/language pathologists offer remedial services and consultative support to public schools. Resource-room teachers, within ministry schools, provide referral services and related support for students' special educational needs (AL Khatib & AL Khatib, 2008). Students identified for special services and supports are mainly identified through a screening protocol that is created and monitored by the MOE.

Within ministry schools, school-counselors provide educational counseling and support social needs for all students. They also act as one of the important resources for determining and referring students who

may have a need to receive services under the category of LD. Furthermore, because the MOE aims to provide effective educational services and more targeted supports to students with LD, it engages in an active campaign to increase awareness and guidance for major stakeholders about the importance and role of programs to serve those students suspected of having LD. Two of these initiatives are providing ongoing professional development for teachers, who will help and teach students with LD and offering guidance to help parents who have children with LD to deal with their difficulties at home (MOE, 2010).

This article provides a review and assessment of the educational system found in Jordan and the attention given to the programmatic needs of students who have been identified as having LD. To accomplish this task, the researcher reviewed the databases available from peer-reviewed published articles and proceedings of conferences that addressed the field of LD in the universities in Jordan, and examined documents available from the Jordanian MOE's website. Through this review, the researcher sought to answer the following questions:

1. How did programs for students with LD develop?
2. How well do these program cater to the needs of students who have been identified as having LD?
3. What are the current practices and challenges facing programs for students who have LD in Jordan?

Learning Disabilities Programs in Jordanian Public Schools

Learning disabilities have been described as one of the most mixed and complicated disabilities in the field of psychology and teaching (Kakabaraee, Arjmandnia, & Afrooz, 2012). Despite having the level of average or above-average intelligence and not having any physical or emotional problems, students with LD suffer from diminished educational achievements and progress differently than their regular school peers (Kakabaraee et al., 2012). According to Hallahan, Lioyd, Kauffman, Weiss, and Martinez (2005), more than 5% of school-age students in the world, were estimated to have LD. In these schools, at least six or so out of 20-30 students in a classroom have LD (Hallahan et al., 2005). These statistics led Kakabaraee and colleagues (2012) to suggest that teachers in public schools should give

more attention and respond to the needs and problems of students with LD.

In Jordan, students with LD are found in the public schools. However, it is difficult to accurately estimate their population since there is no formal data collection agency. Additionally, there is no unified system for determining and supporting students with LD as there is lack of appropriate tests and shortages in assessment specialists. Many of these students are commonly determined as having LD or slow-learners based on teachers' observations and their subjective impressions (AL Khatib & AL Khatib, 2008). Nonetheless, Al-Zyoud (2011) maintains that 12.6 to 30 percent of students in Jordan's public schools have LD.

Emergence and Development of Learning Disabilities Programs

The education services in Jordan for students with LD started in 1987. The MOE, in collaboration with Queen Alia Fund (QAF), implemented the first training program for teachers and parents to address the education of students with LD (Hadidi, 1998). In 1993, the Princess Sarvath community College (PSCC) was the first educational institution in the Arab region to specialize in addressing the needs of students with LD. It was founded to facilitate the services by providing training programs for pre-service and veteran teachers in the field of LD.

The early movement to improve special education programs led to the creation of regulations that guaranteed rights for students with disabilities. The Welfare of Disabled People (WODP) passed in 1993, is the first piece of legislation to address the needs of individuals with disabilities in Jordan. It included important provisions of special education services that ensured students with disabilities had rights equal to those of other people in a free society (Amr, 2011). As a result of this law, the responsibility of educational programs and diagnosis for students with disabilities was shifted from the Ministry of Social Development (MOSD) to the MOE. Additionally, in order to meet the needs of students with disabilities and integrate them into regular classrooms, a new Department of Special Education (DOSE) was created in the MOE in 1993 (Al-Zyoud, 2011; Hadidi, 1998). The DOSE played a major role by providing the teacher training programs, and establishing the first 29 resource rooms in the Kingdom's schools (Al Jabery & Zumberg 2008; MOE, 1996). However, as previously stated, the number of resource-rooms in ministry schools exceeds 834 and is growing (Al shoura & Ahmad, 2014; MOE, 2012). In 2010, the ministry established a Department

of Evaluation and Diagnosis and Services for Students with LD (MOE, 2011).

Current Provisions for Jordan's Students with Learning Disabilities

Students with LD receive their education in general classrooms with special education and related support services delivered in resource-rooms. They also fully participate in the general education curriculum without modifications and share with their peers without disabilities in non-curricular activities such as sport and school trips. Students with LD receive their education at elementary schools from age six to 16 years, followed by secondary school until the age of 18 years. Unfortunately, after they complete their education in elementary and secondary stages, many of students with LD have no opportunity to enroll in any further education due to their inability to pass general secondary exams.

The resource rooms where students with LD are educated are comprehensive. Students are engaged in intensive, small-group remedial education programs for a period of time, not to exceed more than three classes each day, as required by the Individual Education Plan (IEP) (Al Khatib & Al Khatib, 2008). The teachers in these rooms prepare IEPs and class schedules for students, after assessment. When students complete their work, they are returned to general classrooms where other work is done (Al Jabery & Zumberg, 2008; Al Khatib & Al Khatib, 2008;). The resource-room teachers focus on the educational services suited to students' level in main subjects such as Arabic language and mathematics. A total of 20-25 students identified as having LD would be served (Melhem & Isa, 2013).

The MOE's aim of creating resource-rooms was mostly to cover the educational needs of students with LD. However, the quality of the programs is still insufficient to meet their unique needs (Al-Natour, 2008). The educational services provided for these learners have not significantly changed. The diagnostic services and development of proper programming are two of the most significant obstacles challenging students with LD in the completion of their schooling (Al-Zyoud, 2011). The Ministry still needs to follow-up and revise evaluation tools to identify the exact needs of students. Moreover, unifying the education curriculum will be necessary to ensure that IEPs are addressed and education can be equitable.

Discussion of Main Issues Related to National Learning Disability Programs

Reality of Evaluation and Diagnosis in Resource-Rooms

In the late 1970s, the assessment and evaluation services for students with LD were launched by the University of Jordan. The first Jordanian version of the Good Enough Scale (GOE), a general LD assessment, was developed for children ages four to eight years in 1978. After that, several versions of the Jordanian test were developed for students with LD in 1981 and 1990 (Al-Zyoud, 2011).

The common tools used to assess students for LD services include mainly the formal battery of tests of LD, checklists, and informal measures (e.g., Arabic language and mathematics) which are prepared by the resource-room teachers. These teachers are then charged with assessing students who are referred by general education teachers to resource rooms for eligibility decisions (Al-Natour, Alkhamra & Al-Smadi, 2008). However, the assessment process should be implemented and executed by a multi-disciplinary team (MOE, 2010).

Unfortunately, the Kingdom's evaluation and diagnostic processes to identify the eligibility of students for resource room services are still not perfect (Al shoura & Ahmad, 2014). Assessment procedures for students identified to have LD in Jordanian schools are not team-based. Furthermore, the process does not begin early enough to identify disabilities accurately. Many of students are not determined to be in need of LD services as a result of their performance on LD tests, which are insufficient. Most of the public schools lack multi-disciplinary teams and appropriate academic tests normed to the cultural standards of the Jordanian people (Al shoura & Ahmad, 2014). Therefore, in most cases, the resource-room teachers define students' eligibility for special education service using academic scores and personal nominations by regular teachers. However, in cases related to perceptual disorders, assessment tools are used (Al Khatib & Al Khatib, 2008).

Many special education teachers are not able to use the available tests to make eligibility decisions for several reasons. One of these reasons is the lack of training and/or appropriate professional development (Al-Zyoud, 2011). Other reasons related to the absence of national assessment guidelines and the lack of formal measurement tools to assess psychological processes and abilities; the reliability of some of the formal instruments as they have been taken from the US and European countries and translated into Arabic

language, without customizing for the Jordanian context. Indeed, most these teachers rely heavily on teacher-made tests of students' academic achievement for making eligibility decisions (Al-Natour, Al-Khamra & Al-Smadi, 2008).

Role of Resource Room Teachers and their Needs

The PSCC launched the first degree granting program with a major in LD in 1998, in order to provide teachers with educational programs for those who wanted to teach students with LD (MoHE, 2010). All Jordanian resource-room teachers are required to hold either a bachelor's degree in special education or in Arabic Language and mathematics, in addition to a diploma which is received after taking a series of courses in learning disabilities for one year at college or university to achieve requirements of the instruction profession. About 80% of resource-room teachers are general education teachers with mostly a diploma degree in LD and the remaining 20% have a bachelor's degree in special education (Al Khatib & Al Khatib, 2008).

Resource-room teachers experience a number of challenges in providing services to students with LD. They provide both academic and remedial services and play a major role in determining the students' difficulties by executing evaluations in isolation; while identifying strengths and weakness, and creating Individual Education Plan (IEP) goals without the assistance of the multidisciplinary team. (Al-Natour, 2008). Moreover, Jordanian resource-room teachers interact with regular teachers who perceive those programs designed for students with LD are unnecessary and therefore refuse mostly to cooperate (Alzyoud, 2011). Al Khatib and Al Khatib (2008) indicated that there are negative attitudes among general education teachers in public education in Jordan to learning environment of these students with LD. Other challenges involve limitations in teacher training, which influences understanding of the unique needs of students with LD (Al-Natour, 2008). Resource room teachers are responsible for writing all IEPs and has little time to give students individualized attention, which leads to another challenge. Finally, the teachers suffer from completing a huge amount of paperwork to supplement the curriculum as instructional materials are unavailable (Al Khatib & Al Khatib, 2008; Al shoura & Ahmad, 2014).

Full-Inclusion Classrooms

Despite the MOE in Jordan assuming full responsibility for the education of students with LD

since the early 1990s, the nature of these programs has not significantly changed (Al-Zyoud, 2011). For example, the resource-rooms as isolated setting in public schools have remained the most commonly used placement alternatives to care and educate those who have LD. Based on this service, students with LD are partially separated from regular classrooms in their schools. Al Khatib and Al Khatib (2008) reported that resource-room programs are limited in terms of administrative support and flexibility regarding curriculum, instruction, and evaluation modification. Additionally, the creation of the Department of Learning Disabilities has not largely improved the way in which students with disabilities are supported in Jordanian public schools (Al-Zyoud, 2011). According to the MOE's figures in 2012, only about 16,803 students were receiving special education services in public schools. This number represents a small percentage of the target population. In this regard, it must be stated that hundreds or even thousands of children with disabilities, particularly those with mild disabilities, are enrolled in general education classrooms; without being identified or provided with necessary supports. "Hidden inclusion" might be the term used for what is largely practiced in local schools (Hadidi, 1998).

Inclusion in the Jordanian education system is a new concept. Recent developments in the education system have encouraged educating students with and without disabilities together in the same classrooms (Amr, 2011; Al shoura & Ahmad, 2014). Jordan enacted legislation in 2007 – the Law for the Rights of People with Disabilities (LRPD). This law directed the MOE and MOHE to adopt inclusive education programs for students with and without disabilities and establish these programs within the national educational system (Abu-Hamour & Muhaidat, 2013). It was also mandated that all educational equipment and arrangements required should be inclusive (Amr, 2011).

Despite the legal stipulation of the law to educate all students in an inclusionary environment, guidelines on how to implement such provision are still unclear (Amr, 2011). In order to make this educational right a reality, there is a need for all concerned parties (e.g., government, NGOs and the private sector) to cooperate and co-ordinate their efforts. Work needs to be done to enforce the implementation of current legislation, engage the community and raise awareness of the rights of students with disabilities, improve teacher training, and develop materials and research to support inclusive efforts. It may be that the relevant legislation is currently too broad to apply to all children with disabilities in Jordanian schools.

Therefore, adopting only the most applicable parts of LRPD would benefit the educational system more than applying the law in its entirety (e.g., adapting it for those that have mild disability or LD). Nonetheless, the policy of including students with disabilities, particularly those with LD, in general education classrooms is an acceptable practice as research (Fayez, Dababneh & Jumiaan, 2011; Hadidi, Smadi & Al-Khateeb, 1994; Hanini, 1989) has indicated that teachers' attitudes are generally positive.

Current Problems Associated with the Provision of Services for Students with Learning Disabilities

The MOE has exerted many efforts to care and support students with LD in public schools since the 1990s (Al shoura & Ahmad, 2014). Even though Jordan's first law addressing disabilities was passed in 1993, its implementation in public schools is substantially not practiced in the real world with these students. In fact, the absence of its effective execution has left a major gap between the framework of this legislation and the provision of special education services. This gap has resulted in a weakness of services for many students, especially those in remote areas of the Kingdom. Al Khatib and Al Khatib (2008) have suggested that financial allocations and the limited support for LD programs may be possible reasons.

Another problem related to the services provided to students with LD involves some parents' reluctance to provide approval for services. While there are many families that would do anything they could help their children obtain the required education supports, there are other families who fail to provide the necessary approval, which prevents students from enrolling in resource room programs and keeps them in the general education classes without receiving the help and support they need. The legislation from the MOE requires that before a child receives special education services, parents have to provide consent.

One of the growing concerns of the Jordanian special education service delivery models for students with LD is lack of cooperation among all involved. Al Khatib and Al Khatib (2008) and Al-Zyoud (2011) asserted that there is a lack of cooperation of regular teachers, counselors, principals, and parents with resource-room teachers. Al Khatib and Al Khatib (2008) indicated that there is absence of administrative support and flexibility, in addition to negative attitudes among general teachers and parents towards resources rooms in Jordan may be possible reasons.

Finally, the lack of targeted professional development opportunities for teachers and other

school personnel on properly assessing students is yet another problem. Teachers do not refer students to resource-rooms in a systematic manner. Placement decisions are often made on the basis of students' academic results and teachers' perceptions rather than accurate psycho-educational diagnosis. Furthermore, the inability of teachers to use existing assessment tools or scarcity of measurement tools are other problems that create challenges (Hadidi, 1998; Khatib & Al Khatib, 2008).

Suggestions for the Improvement of Services for Students with Learning Disabilities

Several recommendations should be considered in an effort to improve programs for students with LD in Jordan. They include:

- a) Activating and supporting the role of the Directorate of Special Education and other related divisions at the MOE. The MOE could accomplish this by employing such strategies as:
 - allocating a separate budget to the director that will be used to increase financial support for programs that serve students with LD,
 - improving the design and delivery of remedial and educational programs for students who are LD so that a wider range of needs are met and school facilities are adequate to meet students specific instructional needs,
 - supplying DOSE with assessment and diagnostic tools that can be used to accurately identify students who may possess LD.
 - evaluating current legislation related to the rights of students with LD, making sure that attention is given to current practices in the delivery of services that reflect America's Individual with Disabilities Education Act (IDEA) 2004.
 - developing appropriate education guidelines, standards and policies to gradually include them in the inclusive classrooms
- b) In order to improve the assessment procedures for students with LD, schools should assess students using a variety of information. This variety could include both formal and informal

assessments, student and parent interviews, and an assessment of students' performance in other environments (e.g., observation of students in classrooms before they are referred for special education services). Specialists also should develop tests that coincide with Jordanian cultural standards and language. Moreover, the identification of students for eligibility for special education services should be made by a multi-disciplinary team (special teachers, general teachers, parents, psychologists among others).

- c) Reconsidering the way in which both the general and special education teachers are prepared. Current practices in teacher training do not support general and special educators to work collaboratively. A new way of training will help enhance program services for students with LD. All teachers, via regular professional development, will be able to learn how to adapt instructional approaches and develop more appropriate strategies for teaching to individual student needs and making eligibility decisions.
- d) Future research should focus on the causes that hinder cooperation and effective communication of major stakeholders in developing special education services and inclusive classrooms for students with LD. If the MOE makes this a priority, a monumental effort will be made to create structural changes necessary for programs and services for students with disabilities to be seen as a worthy investment for the Jordanian people.

Conclusion

The MOE assumed full responsibility for the education of students with LD in the early part of the 1990s, by providing support and care needed for these learning disabled students in public schools. One of the pioneering experiences in the field of LD in Jordan was the establishment of resource rooms all over the Kingdom. Currently, one of the priorities of the MOE is the achievement of full inclusion to students with and without LD in the general education classroom to obtain their education. However, the support offered in terms of finance, material, and equipment to provide such education has been found to be inadequate in the public schools. This inadequacy has created a structural obstacle that makes it difficult for the education of students with LD to be effectively addressed.

While it may not be possible to access the accurate number of students with LD in Jordanian public schools, it is certainly possible to get a good understanding of the problems that confront them every day in their educational settings. New alternatives for service-delivery and effective action plans for overcoming barriers and confronting challenges are needed. This will require a change in attitudes of families and communities, family training, teacher preparation, inclusive education projects, and instructional equipment upgrading in order to achieve the wide-scale support necessary for a truly inclusive education system and society. The MOE can serve as the agent of change by bringing all the major stakeholders together to begin the discussion and plot a course of action.

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School Context Matters: Learning Disabilities and U.S. Adolescent Support Choices from Latino-Majority Communities

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Abstract

There remains a paucity of research examining the support-seeking behaviors among Latino students specifically and adolescents of ethnic minority background more generally (Carlo & Guzman, 2009). While few investigations provide some evidence that Latino adolescents, especially those with a learning disability, are at greater risk to be socially isolated and overly self-reliant (Morrison, Laughlin, Smith, Ollansky, & Moore, 1992; Morrison, Laughlin, San Miguel, Smith, & Widaman, 1997), the literature is in need of updating. This exploratory study recruited 28 Latino male adolescents with and without a learning disability living in the Southwest region of the United States. Participants completed a social support choice questionnaire by selecting support options for managing various life stressors. Results from this study yielded contradictory results from previous explorations of Latino and learning disabilities support-seeking choices, with mostly no significant differences to report in terms of selecting among various social support network members.

Introduction

A learning disability (LD) presents itself as a deficit in one or more psychological processes including visual, auditory, motor, and/or language processing and because social competence requires an individual to have the cognitive ability to process information from voices, intonation, and nonverbal cues, individuals with LD may be struggling with similar processing difficulties in the social domain as they do in the academic domain leaving them at a greater social risk than their peers without LD (Nowicki, 2003; Semrud-Clikeman, 2007). To date, literature examining the relationships and social competence of students with LD point in several directions. From poor metacognitive strategies affecting social skills (Kavale & Forness, 1996), possible past rejection which may stem from peer preferences (Nowicki, 2003), to school isolation, withdrawal, and a sense of normlessness (Martinez & Semrud-Clikeman, 2004; Semrud-Clikeman, 2007) affecting social skills and development of positive relationships (Estell et al., 2008), the support-seeking choices of students with LD can be significantly influenced by any number of factors.

What is also worth noting is the historical and continuing disproportionate representation among

students of ethnic minority background being referred to and receiving special education-related services (Losen & Orfield, 2002). Although students with LD represent at least 1-2.5% of the school population (Gillberg & Soderstrom, 2003), there is a higher proportion of referral and eventual placement of students of ethnic minority background for special education-related services (Artiles, Harry, Reschly, & Chinn, 2002) in a school system that often reflects the values and norms of the ethnic majority. In other words, the cultural mismatch between students of ethnic minority and teachers and school personnel of mostly European background can lead to an over-identification of students of ethnic minority background for special education services (Artiles et al., 2002).

Unfortunately, the social environment as a mediating factor on the social and academic success of students with LD has largely been neglected and very few social support studies including Latino adolescents with LD exist (Fleming, Cook & Stone, 2002). Outdated literature on the Latino adolescent support seeking behaviors find that these students, especially males, are at greater risk for making non-normative support choices and being overly self-reliant (Morrison, Laughlin, San Miguel, Smith, & Widaman, 1997; Windle, Miller-Tutzauer, Barnes, &

Welte, 1991). Furthermore, Latino adolescents with LD who receive much of curriculum in pull-out classrooms or who are away from their peers without LD may be at even greater risk of choosing nobody and being overly self-reliant when managing daily stressors (Morrison, Laughlin, Ollansky, & Moore, 1992).

Since the time these examinations took place, large population shifts have taken place where Latinos are among the fastest growing ethnic group in the United States (LeCroy & Krysik, 2008) and more minority-majority schools have sprouted, particularly in the Southwest. This exploratory group comparison study was carried out to begin updating the literature on social support-seeking behaviors with attention to a growing Latino (with and without LD) student body and whether overly self-reliant choices persist if these adolescent students received their education in inclusive environments and were part of the ethnic majority of their school community.

Latinos Students, Schooling, and Social Stressors

Latino students have endured a long history of school-based segregation in the United States public school system (Gandara & Aldana, 2014). In particular, the early to mid-1900s saw many instances of Anglo parents arguing for Latino children to be segregated and be given special attention for their perceived deficiencies in language and academics so as to not affect the progress of their own children (Powers, 2008). Rather than seeing the benefits language and other salient cultural characteristics Latino children bring to school, the common practice was to *Americanize* the Latino child by suppressing salient cultural characteristics like the broad implementation of educational policies that punished American Latinos for speaking their home language (Gonzalez, 1999). As schools have had to address these discriminatory practices, there are still isolation issues that Latino adolescents and their families must struggle with as nine out of ten low-income, minority schools have a Latino enrolment approaching nearly fifty-percent (Orfield & Frankenberg, 2014). As a result, Latino adolescents are less likely to have heterogenous peer interactions and are more likely to be socially isolated from students of dissimilar ethnicities (Gandara & Contreras, 2009; Gandara & Aldana, 2014; Population Reference Bureau, 2009).

While there are a host of negative consequences associated with being a socially isolated community, including long-term health impacts, a lack of access to educational resources and gaining well-paid employment (Population Reference Bureau, 2009),

there have been a few unintended benefits for Latino adolescents, especially those with a LD, where the day-to-day interactions may support students to feel comfortable in their own skin in a minority-majority school system since Latino students are more likely to end up being educated alongside students with similar salient cultural backgrounds (Gandara & Contreras, 2009; Gandara & Aldana, 2014).

Still, Latinos are more likely to be a socially and economically isolated community, a situation that is associated with a list of negative consequences (Population Reference Bureau, 2009). Latino adolescents in the United States are especially vulnerable in relation to other ethnic groups for facing various life stressors (de Anda et al., 2000; Surgeon General's Report, 2004). Adolescence is a key transitional phase in which youth experience great change both biologically and socially and the added stressors for many Latino adolescents can be difficult to manage as these youth are more likely to experience daily stressful experiences (Attar, Guerra, & Tolan, 1994; Brooks-Gunn, Klebanov, & Liaw, 1995), report a greater incidence of depression and delinquency (Surgeon General's Report, 2004), and have greater level of family stressors than any other demographic population (de Anda et al., 2000). So it is out of necessity that these adolescents who are faced with a multitude of risks in their daily lives are not managing their stressors alone. If these adolescents do choose to be overly self-reliant when managing daily stressors or if their social support is limited, they may be at risk for health-related consequences (Evans & English, 2002) including depression (Zimmerman, Ramirez-Valles, Zapert, & Maton, 2000). Greater access to support, on the other hand, can decrease these youth's likelihood of experiencing these symptoms (Pierce, Frone, Russell, Cooper, & Mudar, 2000).

Adolescent Social Network and Support Seeking Behaviors

Having supportive relationships can be a protective factor, acting as a buffer against life stressors (Malecki & Demaray, 2006), but accessing support in some way is essential. When managing daily life stressors like completing schoolwork, working through peer, teacher, or family relationship problems, or making plans for the future, many adolescents may seek instrumental, emotional, and material support from a diverse and extensive social network including parents and siblings, teachers and peers, and extended family members and non-related adults (Malecki & Demaray, 2003; Reddy, Rhodes, & Mulhall, 2003). Deciding which member to access support from can be

Table 1

Student Demographics: Groups by Grade

| <u>Group</u> | <u>9th Grade</u> | <u>10th Grade</u> | <u>Total N</u> |
|--------------------|-----------------------------|------------------------------|----------------|
| Latinos with LD | 9 | 2 | 11 |
| Latinos without LD | 6 | 11 | 17 |
| Group Total | 15 | 13 | 28 |

dependent on adolescent perceptions of support types and level of support offered. For instance, adolescents report that parents provide the highest emotional and informational support, a support associated with higher levels of psychosocial and academic adjustment (Wenz-Gross, Siperstein, Untch, & Widaman, 1997). Siblings can be sources of advice for personal problems and can provide high levels of warmth and nurturance (Whiteman, McHale, & Crouter, 2007; Widmer & Weiss, 2000). Extended family can provide instrumental, financial, and emotional support and are among the first non-parent adolescents meet and bond with, providing additional support as confidants, mentors and role models (Loury, 2006). So too can extended family have a positive effect on the behavior of their adolescent kin through mentorship, embedding into the youth a healthy work ethic, respect for others and seeing value in education (Waldrop et al., 1999).

Adolescent support extends beyond the familial unit. Teacher and school sources are reported to provide informational support that is associated with improved adaptive emotional functioning and achievement in the school context (Malecki & Demaray, 2003; Reddy et al., 2003). Adolescents report that classmates and close friends provide the highest levels of emotional support as well as instrumental aid such as providing assistance with school-related tasks (Malecki & Demaray, 2003). Moreover, the adults outside of the adolescent's family but residing in their communities can have a role in building relationships and impacting their development. Coming from poorer areas with limited resources, adult role models can foster resiliency and develop identities for many adolescents (Hamilton & Darling, 1996) which is especially helpful for Latino adolescents who are more likely to come from low-income neighborhoods (Bond Huie, Krueger, Rogers, & Hummer, 2003).

While Latino adolescents have more difficulties and stress in the home and in their community than most other racial and ethnic groups (de Anda et al.,

2000; Surgeon General's Report, 2004), there is a paucity of research examining the social support networks and support seeking behaviors among Latino students specifically and adolescents of ethnic minority background more generally (Carlo & Guzman, 2009). The few investigations provide some evidence that Latino adolescents can be socially isolated and overly self-reliant, especially males, when presented with various life stressors (Morrison et al., 1992; Morrison et al, 1997; Windle et al., 1991) but the literature regarding Latino adolescents, with and without disabilities, is in need of updating.

Method

Participant Characteristics

This exploratory group comparison study sampled adolescents from schools located in the Southwest region of the United States living in close proximity to the U.S./Mexico border. Nearly 70% of the communities contain residents self-reported being of Latino background. As a percentage, the communities selected contain four times as many citizens who self-report being Latino compared to the national reporting of 15.1%. With a high foreign-born population, more than half of the communities' populations speak a language other than English in their household. Soon after making contact with prospective school administrators willing to allow entry to conduct this study, a random selection of 40 Latino students with and without LD in grade nine and ten were generated by school administrators and were provided a letter in English and Spanish to attend an information meeting held in the school's library. The information meeting was provided in English and Spanish and each student who expressed interest was provided a dual-language information packet about the study and consent forms for their parent/guardian to sign. Approximately 28 students returned with signed parent/guardian and

Table 2

Adolescent Support Choice Descriptives

| <u>Latinos with LD</u> | <u>G/C</u> | <u>P/C</u> | <u>R/AOS</u> | <u>Sibling</u> | <u>Teacher</u> | <u>Nobody</u> |
|-------------------------------|------------|------------|--------------|----------------|----------------|---------------|
| Mean | 3.64 | 3.09 | 1.18 | 1.00 | .91 | 2.18 |
| N | 11 | 11 | 11 | 11 | 11 | 11 |
| Std. Deviation | 2.46 | 2.84 | 1.25 | 1.18 | .8 | 2.85 |
| <u>Latinos without LD</u> | | | | | | |
| Mean | 3.41 | 2.12 | 1.94 | .82 | 2.18 | 1.53 |
| N | 17 | 17 | 17 | 17 | 17 | 17 |
| Std. Deviation | 2.74 | 2.20 | 2.72 | 1.38 | 1.62 | 2.47 |

Note: G/C = Guardian/Caregiver; P/C = Peer/Friend; R/AOS = Relative/Adult Outside of School

student/participant consent forms for a response rate of 70%.

Of the study sample, 11 of the participants were confirmed by school site administrators as having been diagnosed with LD and met diagnostic criteria for having LD as determined by state and DSM-IV-TR criteria (see Table 1). The mean age of students with LD is 15.8862 (SD = .69512, Minimum = 14.75 years of age, Maximum = 17.17 years of age). All students who participated in this study were confirmed by school administrators as having accessed the school curriculum in full-day, inclusive settings.

Instrumentation

A twelve-item instrument posing an array of life stressors common to adolescents was provided in a packet for participants. Questions covered a variety of social scenarios including: (1) Getting along with friends/peers; (2) Getting along with parents; (3) Struggling with drug abuse; (4) Support with schoolwork; (5) Getting along with teachers; (6) Managing stress/depression; (7) Getting along with siblings; (8) Seeking support for physical abuse; (9) Seeking support for emotional abuse; (10) Seeking support for sexual abuse; (11) Making plans for the future and; (12) Advice with relationships/dating. Participants are given the options of choosing: (1) Guardian/Caregiver, (2) Peer/Friend, (3) Relative/Adult Outside of School, (4) Sibling, (5) Teacher or (6) Nobody for managing these life stressors.

Procedure

After approval was obtained from university and school district ethics boards, invitations were sent to two school sites in the Southwest region of the United States whose school comprised of a Latino majority. Researchers coordinated with school administrators (e.g., principals and assistant principals) to develop a random sample of Latinos in grade nine and ten, with and without LD. These students were notified by school administrators of their selection and attended an information meeting. Students were informed in both English and Spanish of the study's purpose, expectations of participants, rights for withdrawal from the study, confidentiality and anonymity rights, dissemination of data and to provide information for any questions the students may have had. Students who decided to take part were sent home with a packet containing English and Spanish parental and student consent forms describing the study and the twelve-item questionnaire. An additional date one week after the initial information meeting had been scheduled for one of the researchers to meet with students needing assistance in completing their relationship inventory. The purpose of this was to reduce psychological harm to student participants who may have difficulty completing their questionnaires because performing this task around other students without LD could have caused distress. In addition to the assistance provided to the student participants (e.g., reading and clarifying questions), counsellors were made aware of the sensitive nature of the questions being asked and were

Table 3

Independent-Samples T-Test of Latino Adolescent Selected Social Support by LD Status

| Support Selection | | Sum of Squares | df | Mean Squares | F | Sig.* |
|----------------------------------|----------------|----------------|----|--------------|-------|--------|
| Guardian/Caregiver | Between Groups | .337 | 1 | .337 | .048 | .827 |
| | Within Groups | 180.663 | 26 | 6.949 | | |
| | Total | 181.000 | 27 | | | |
| Peer/Friend | Between Groups | 6.326 | 1 | 6.326 | 1.037 | .318 |
| | Within Groups | 158.674 | 26 | 6.103 | | |
| | Total | 165.000 | 27 | | | |
| Relative/Adult Outside of School | Between Groups | 3.851 | 1 | 3.851 | .744 | .396 |
| | Within Groups | 134.578 | 26 | 5.176 | | |
| | Total | 138.429 | 27 | | | |
| Sibling | Between Groups | .208 | 1 | .208 | .122 | .730 |
| | Within Groups | 44.471 | 26 | 1.710 | | |
| | Total | 44.679 | 27 | | | |
| Teacher | Between Groups | 10.727 | 1 | 10.727 | 5.648 | .025** |
| | Within Groups | 49.380 | 26 | 1.899 | | |
| | Total | 60.107 | 27 | | | |
| Nobody | Between Groups | 2.843 | 1 | 2.843 | .411 | .527 |
| | Within Groups | 179.872 | 26 | 6.918 | | |
| | Total | 182.714 | 27 | | | |

*Significant at the .05 level; **Eta Squared .178

on-hand in case any student wished to speak with them.

Results

Using the statistical software, SPSS, descriptive statistics including mean and standard deviation were calculated for each support choice category to highlight collective habits in support seeking behaviors among the two groups. These data are provided in Table 2. Group mean scores were calculated by averaging the total number of responses ($N = 12$) per questionnaire for each support category and for each group. For example, Latinos with LD produced a mean score of 3.64 responses for guardian/caregiver, which meant they were likely to select a parent for social support an average of 3.64 times per questionnaire. Combining the rest of this group's responses from other support categories such as peer/friend ($M = 3.09$), relative/adult outside of school ($M = 1.18$), sibling ($M = 1.00$), teacher ($M = .91$), and nobody ($M = 2.18$) results in 12 total responses. The standard deviation was also generated using SPSS software, a statistic that indicates how

much the scores provided by each group deviates from the group's mean score.

The guardian/caregiver category for the two groups had a greater frequency for selection among participants compared to any other network members, with Latinos with LD ($M = 3.64$; $SD = 2.46$) having a slightly higher mean than their peers without LD ($M = 3.41$; $SD = 2.74$). Latino adolescents with LD tended to rely more on friends and peers for social support ($M = 3.09$; $SD = 2.84$) compared to their peers without LD ($M = 2.12$; $SD = 2.20$). Those with LD chose their relatives and/or adults outside of school at a lower rate ($M = 1.18$; $SD = 1.25$) compared to their peers without LD ($M = 1.94$; $SD = 2.72$). When it came to reliance on sibling support, adolescents with LD had the highest mean score ($M = 1.00$; $SD = 1.18$) but generally low overall. In fact, when compared to other support categories, the entire sample of participants generated low mean scores, indicating low levels of support-seeking for siblings among this study's participants. There was a low reliance on teacher support among students with LD, indicated by their mean scores ($M = 0.91$; $SD = .83$) while youth without LD chose teachers for support more than twice as

much ($M = 2.18$; $SD = 1.62$). Finally, those adolescents with LD opted to select nobody slightly higher ($M = 2.18$; $SD = 2.85$) than their peers without a LD ($M = 1.53$; $SD = 2.47$). Overall, adolescents with LD selected a support option for the twelve stressors common to adolescents 81.8% of the time, opting to select “nobody” for managing these stressors 18.2% of the time. This is compared to the group without LD selecting someone for support 87.2% of the time and selecting “nobody” 12.8% of the time.

Prior to determining whether significant differences among mean scores were present, assumption tests were performed. A test of the equality of error variances and normality of the data distribution were performed and with no violations to report ($p > .05$). Once assumptions were met, an independent-samples t -test was performed. These data are presented in Table 3. Given that no homogeneity of variance violation was found, greater confidence in the F values generated by the t -test output can be reported. Results from the test indicate insufficient evidence to claim that group means for the support categories were widely dissimilar. No significant differences were reported for five of the six support choice categories. Latino adolescents with LD were, however, less likely to select their teacher for social support ($M = 0.91$; $SD = .83$) compared to their peers without LD. To measure the magnitude of these mean differences, an effect size was calculated by finding the difference between the mean scores of both groups divided by the square root of the within-group standard deviation for the teacher support category (Howell, 2008). The magnitude of the differences in means (mean difference = 1.27, 95% CI) was very large ($eta\ squared = 1.78$), indicating that the choice to select teachers for support when managing stressors among Latinos with and without LD were quite different.

An additional t -test found no significant difference between the groups in terms of “selecting someone” (guardian/caregiver, peer/friend, sibling, teacher, and relatives/adults outside of school combined) and “selecting nobody” between the groups are reported with all p values being greater than .05. And finally, ranking support choice selections indicated that adolescents with LD selected guardian/caregiver and peer/friend over other support categories as often as their peers without LD. Both groups had low support selections for sibling support; but siblings were chosen at a higher rate for managing stressors related to school work and planning for the future. The primary selections for both Latino groups were generally similar across categories. When asked who they would go to if victimized by verbal/emotional, physical, and/or sexual abuse, both Latino groups chose support

from their guardian/caregiver more often than any other support choice. When asked who they would seek support from when managing relationship difficulties with their parents, teachers and siblings, Latinos with LD opted to select a peer/friend while their peers without LD looked towards a relative and/or adult outside of school. Overall, both groups had a tendency to choose support from their guardian/caregiver or peer/friend over a relative/adult outside of school and were less likely to go to their siblings for most stressors other than relationship advice and planning for the future.

Discussion

Despite this examination of the support seeking behaviors of Latino adolescents with and without LD, just a few studies exist that investigate the social environment as an influencing factor on the social and academic development of Latino students with and without LD (Flemming et al., 2002). Past studies have found that being of ethnic minority background in the school community elevates the risk for making non-normative support seeking choices, including social isolation and over self-reliance (Morrison et al., 1992; Windle et al., 1991). Because school demographics were unclear in previous studies and the American Latino population is growing at such a remarkable rate (LeCroy & Krysik, 2008) this study sampled Latino adolescents with and without LD who were part of the ethnic school majority and were receiving their education in inclusive environments –as opposed to receiving the curriculum in part or full-day special education classes. This exploratory study, utilizing a group comparison research design, found that the social support choices among Latino students with LD had similar support seeking selections compared to their peers without LD, with mostly no significant differences to report. A lack of significant difference in support seeking behaviors should be seen as significant given that the support seeking trend among the two groups is in contrast to the literature that found Latino adolescents with LD to be more socially isolated, choosing nobody for social support, and opting to select non-normative support when managing various life stressors.

Only the *teacher* category revealed statistically significant differences with the magnitude of this difference being quite large. Several reasons can account for this difference. One reason may result of poor student-teacher relationships. Teachers tend to see students with LD as having substandard social skills compared to their peers who are considered low-achieving, average-achieving and high-achieving in

academics (Nowicki, 2003) and it may be that the LD label contributes to any possible negative attitudes that can be held by teachers and other professionals in the school, which could result in student-teacher tension. Another possibility is the adolescent perception of their teachers. Whether an adolescent with LD has obstacles with processing various social cues or whether any tension exists in the teacher-student relationship, teachers may very well symbolize what adolescents with LD see as their largest struggle, academic failure. This held view of teachers could contribute to problems between adolescent students and their teachers, consequently leaving the adolescent less likely to choose their teacher for support with various academic tasks and other personal stressors.

What also should be noted was the frequency with which adolescents selected relatives and adults outside of school for managing life stressors, a support selection on par with the selections of parents. This is unsurprising given that more than two-thirds of Latinos live with or in close proximity to their family and tend to have higher extended family involvement than other ethnic groups (Sarkisian, Gerena, & Gerstel, 2007). What was consistent with previous findings in the literature (Morrison et al., 1992; Morrison et al., 1997) in regards to adolescent's support choices includes their reliance on parents when needing assistance for getting along with teachers and family members and opting to consult teachers for support with school work.

What could be contributing to the similar support seeking behaviours among this study's adolescents with and without LD are the social preferences made by those adolescents without LD. Because individuals with LD may be at risk for social deficits partially due to the social preferences made by their non-disabled peers (Nowicki, 2003), friendships among peers without LD have the potential to be reciprocated in inclusive classrooms. Moreover, students with LD sampled in this study received the curriculum in the general education classroom and it may be that these support-seeking behaviors of these students modeled their own support choices after their peers without LD. Along these lines of modeling after their non-disabled peers, what might also be influencing these support choices among Latino students with LD may be attributed to cultural similarities wherein social demographic characteristics leads to a socialization process in which individuals who associate with each other, regardless of non-cultural differences (e.g., LD) can influence one another. This socializing process may compel Latino adolescents with LD to model after their peers without LD, compensating for the lack of metacognitive strategies observed in individuals

with LD that are needed for social development (Kavale & Forness, 1996).

Modeling support-seeking behaviors should not be assigned to just the Latino students without LD. It may be that modeling support-seeking behaviors can have a bi-directional influence between Latino students with and without LD. Strong ethnic salience could take precedence over individual differences such as a student having a disability. Regardless of LD diagnosis, students with similar ethnic backgrounds including shared oral language, customs and traditions, spirituality, familial experiences among other things, may have a role in influencing one another's choices for support. Because Latino communities are more likely to place the values and interests of others in their ethnic group above their own (Gaines et al., 1997), there may be a greater likelihood of Latino adolescents to cross boundaries within their cultural group and associate with each other regardless of LD status. Further to this, associating across different units within a school (i.e. students who gravitate towards one school group or club over another) has been shown to be greater among young people of ethnic minority background (Mollica, Gray, & Trevino, 2003) and in this study, similar patterns of support seeking choices may be reflective of ethnic salient characteristics (e.g. similar academic and relationship experiences, shared linguistic and family values) taking priority over disability status.

Regardless of a LD diagnosis, students with similar ethnic and racial backgrounds, oral language, customs and traditions, may have a role in influencing each other's choices for support. In contrast to this study, many Latino adolescents continue to be sampled from schools where they represent the school's ethnic minority. Because students of ethnic minority background are more likely to have feelings of alienation, a sense of isolation, normlessness (Brown, Higgins, Pierce, Hong & Thoma, 2003), and for students with LD especially, a greater likelihood to withdraw (Martinez & Semrud-Clikeman, 2004; Semrud-Clikeman, 2007), adolescents of ethnic minority background, as well as those with LD, may lack a sense of belonging or connection to the values and norms of the majority. Therefore, teachers and other school personnel should be mindful of the possible cultural mismatch that can exist between themselves and their students with and without LD and of ethnic minority and majority background.

Limitations and Future Directions

Due to the nature of this exploratory study, the responses were collected from a small sample of

participants in grade nine and ten at one point in time and future research should look to address greater reliability as well as validity to claims made here. Quality of the assertions made in this paper could do so by including larger sample sizes and providing participants the opportunity to share whom they would seek support from for managing various life stressors at multiple times in a school year. Moreover, the social stressors posed in the questionnaires were hypothetical situations that participants had to imagine they were faced with. Some students may or may not have been managing one or more stressors at the time of the study, so it is possible that the support choices selected by the participants would differ if they were faced with the stressor in reality. Additionally, social scenarios were selected by the researcher and did not include other common stressors that could generalize to other populations including the management of a death of a family member or friend, parental divorce, or school and online bullying.

Many educators and researchers today view processing deficits as a primary variable affecting support seeking behaviors and social isolation among adolescents with LD. However, the data from this exploratory study suggests that possible social isolation and non-normative support seeking behaviors among Latino students with LD may be reduced by placing these students with their peers without LD with whom they can identify with. The present findings suggest that researchers investigate students of ethnic minority in various school contexts as support-seeking behaviors could possibly be reflective of minority/majority status students hold in their school environment. Researchers and teachers should also work together to develop environments that reduce over self-reliance when managing various life stressors as well as creating a learning environment that is more supportive so as to lessen social isolation. Teachers may find that by providing opportunities for students of ethnic minority background to identify with culturally similar others may help to reduce social isolation among some of their students that may be a result of cultural differences between students of ethnic minority background and their peers and teachers of ethnic majority background that is so prevalent in the educational system.

Not only is there a need for research on students with exceptionalities as schools become more socially inclusive, but race and ethnic population shifts require researchers to better understand the way in which ethnic and racial groups behave and seek out support under certain conditions over time. The school environment can pose other social problems for students of ethnic minority background, including

estrangement from peers and friends, disconnection from daily school functions, and academic difficulties that leave ethnic minority adolescents in conflict with their teachers. Isolation and disconnection from established school routines may not only be a consequence of abrupt pullouts for additional academic support. These feelings have been theorized as a result of *cultural mismatch* (Villegas & Lucas, 2002) which often exist as differences in the lived-experiences and values among students and families of ethnic minority background and the predominantly White, mono-lingual educational system inextricably linked to the educational outcomes of these adolescents (Villegas & Irvine, 2010). The results from this study demonstrate need for future research into adolescent ethnic minority-majority schools and the possible influences the schooling environment can have on their support-seeking behaviors. When students are in an academic environment that they perceive as consistently inclusive, is representative of their own cultural values and experiences, allows greater access for interacting with peers with and without disabilities and are involved in their academic planning for the short- and long-term, the potential for healthier and more trustful relationships may be formed between the adolescent student and their network members.

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Early Childhood Interventions for Children with Disabilities in Botswana: Policy and Practice

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Abstract

The early years constitute a formative stage in child development and family life, and as such warrant special attention and services. The aim of the study was two-fold; a) to critically analyze available education policies in Botswana addressing early childhood interventions for children with disabilities; b) to investigate the views of government officials and those from Non-Government Organizations (NGOs), on early childhood intervention policies and practices. Using a qualitative approach, nine policy-makers and ten program coordinators from NGOs were interviewed. The findings revealed that early childhood intervention services in Botswana are limited and unevenly distributed. Lack of coordination among service providers made the early intervention ineffective. It is recommended that the existing Early Childhood Education and Care policy should incorporate guidelines on early childhood intervention for children who are at risk or have developmental disabilities.

Introduction

Early intervention services in most developing countries are designed to meet the developmental needs of children from birth to five years of age who have a developmental delay or are at-risk of challenges in physical, cognitive, communication, social, and emotional development. However, the type and extent of such services vary according to different countries' educational policies, political and socio-economic environment, resources, and funding (Guralnick, 2008). Although, research has shown that investment in the early years out-performs other public policy options in terms of savings on remedial programs (Kleberg, Westrup, Stjernqvist, & Lagercrantz, 2002; Koegel, Koegel, Ashbaugh, & Bradshaw, 2014; Shonkoff & Phillips, 2000; UNESCO, 2002), it is relatively under investigated in the context of Botswana. Hence, this study was initiated.

Over the years, the importance of investing in early childhood intervention has gained increased attention of governments and agencies around the world. Factors contributing to this recognition include economic and social advances as well as changing knowledge and views of disability (Simeonsson, 2000). Universally, there is an increased awareness of the early years as a critical period for promoting physical, cognitive, social, and emotional growth as well as language acquisition (Shonkoff & Phillips,

2000). Research in this line also evidenced the promotion of mother-child interactions and better academic attainment of children with Special Educational Needs (SENs).

Background

Botswana gained independence in 1966 from the then colonial government of Great Britain and at that time it was one of the poorest and least developed countries in the world. Provision of education prior to independence was limited to a few primary schools which in most cases belonged to some Christian organizations and other Non-Governmental Organizations (NGOs). In post-independent Botswana, the pre-colonial education system continued. The first education policy, commonly known as *Education for Kagisano*, was developed in 1977 to provide education for its citizens; however, early childhood education was not recognized at that time (Government of Botswana, 1994). The policy was revised in 1994 in order to enhance access to education for all learners including pre-primary learners as well as for learners with disabilities. When addressing these policies, Malatsi (2009) argued that although both the first and the revised policies recognized the importance of providing education to all citizens, it did not address early childhood education and the education of learners with SENs was never a priority.

History of Education for Learners with Special Educational Needs in Botswana

With regard to primary and secondary school students with disabilities, the provision of services in Botswana began in 1969 with the establishment of a resource center for students with visual impairment in Mochudi by the Dutch Reformed Church. Other services then followed. For example, a special school for children with intellectual and physical disabilities was established by the Camphill Community Trust in 1974 at Ramotswa. Classes for children with hearing impairment were established by the Botswana Society for the Deaf in 1979. Unfortunately, it initiated the parallel system of Special Education and Regular Education and promoted more segregation (Mukhopadhyay & Nwaogu, 2009). Nevertheless, it created access to education for learners with SENs in Botswana.

Although learners with SENs gained access in special school, the quality of services in these schools had always been questionable (Hopkin, 2003). It could be attributed to the fact that the Botswana government did not take direct responsibility for the education of students with disabilities until 1984. The first administrative unit for special education within the Ministry of Education was established to coordinate activities related to the education of SENs. It established a number of integrated classes (classes for students with the same type of disability within a regular school) in government primary and secondary schools. Despite improving access to education for learners with SENs in primary and secondary schools, recognizing the importance of early intervention of these learners did not receive adequate attention. Hence the following section tries to highlight the current scenario of early childhood intervention services in Botswana to provide the landscape of the research.

Current Situation in Early Childhood Education and Care in Botswana

Although the importance of Early Childhood Education (ECE) has been raised by various international conventions and by independent researchers, governments in many developing countries including that of Botswana did not take the responsibility of offering these services (Malatsi, 2009). It is mostly offered by private individuals or organizations such as day-care centers, pre-schools, play schools, kindergartens, reception schools, crèches, and nurseries. Some institutions operate half-day whereas others full day. Those which are attached

to English-medium primary schools prepare children for entering standard one by giving pre-reading, pre-writing, and pre-number skills, whereas others emphasize social and or/adaptive skills only. Bose, Monau, and Masole (2007) argued that there were no standards set which could guarantee the availability of uniform, quality early childhood education and care services. They are mostly evaluated and monitored by city councils which are not regulatory bodies for education.

Therefore, there is need to provide an appropriate institutional framework to meet the basic learning needs of younger children. Additionally, the government should take up the responsibility and provide early childhood education and care. At the same time, it is important to underscore that very few centers admit students with disabilities with an excuse of “we don’t have adequate training” (Malatsi, 2009, p. 111). According to Malatsi (2009, this is due to lack of policy framework on early childhood education. It is therefore, important to critically evaluate the early childhood education and care of Botswana (Government of Botswana, 2001) to provide a framework for this research.

Policies Relating To Early Childhood Education Services

In 2001, an early childhood education and care was established after the recommendations made in the Revised National Policy on Education (RNPE) (Government of Botswana, 2001) to accommodate for the care and development of children. However, it does not have substantive recommendations on early childhood intervention for learners with SENs (Government of Botswana, 1994). While early childhood intervention is recognized as important, the government does not play a critical role in the provision of support and services for children with disabilities except for having provided the senior education officer post for early childhood education and special education in the Division of Special Support Services (DSSS). It is therefore not surprising that the needs of early childhood education and care for young children with disabilities are not adequately addressed and left to NGOs. The NGOs are equally overwhelmed because of inadequate funding and lack of space (Malatsi, 2009). In addition, most of these centers are manned by untrained personnel (Bose, 2010; Kiyaga & Moores, 2003; Maunganidze & Tsamaase, 2014).

Table 1

Personal and Professional Backgrounds of the Participants

| Participant | Gender | Position Held | Institution | Qualification | Experience |
|-------------|--------|-------------------------------------|-------------|---------------------|------------|
| 1 | F | Chief Education Officer | MOESD | M. Ed (Sped) | 20+ |
| 2 | F | Coordinator Central Resource Center | MOESD | M.A (Sped) | 15+ |
| 3 | F | Education Officer V.I. | MOESD | B.Ed. (Sped) | 15+ |
| 4 | F | Education Officer HI | MOESD | B.Ed. (Sped) | 15+ |
| 5 | F | Education Officer ID | MOESD | B. Ed (Sped) | 15+ |
| 6 | F | Education Officer LD | MOESD | B.Ed.(Sped) | 15+ |
| 7 | F | Education Officer EC | MOESD | B.Ed. (Sped) | 15+ |
| 8 | F | Occupational Therapist | MOESD | Masters | 7+ |
| 9 | F | Educational Psychologist | MOESD | Masters | 10+ |
| 10 | F | Coordinator | NGO | Masters | 7+ |
| 11 | F | Coordinator | NGO | Diploma (Sped) | 10+ |
| 12 | M | Coordinator | NGO | Diploma (Soc.work) | 20+ |
| 13 | F | Coordinator | NGO | B. Ed (Nursing) | 20+ |
| 14 | F | Coordinator | NGO | Diploma (Sped) | 15+ |
| 15 | F | Coordinator | NGO | Diploma (Sped) | 15+ |
| 16 | F | Coordinator | NGO | B.Ed. (Nursing) | 20+ |
| 17 | M | Coordinator | NGO | HND(Finance) | 20+ |
| 18 | F | Coordinator | NGO | Certificate (Admin) | 5+ |
| 19 | F | Coordinator | NGO | B.Ed.(Sped) | 15+ |

Purpose of the Study

The purpose of this study was two-fold: a) to investigate the extent to which educational policies in Botswana addressed early childhood interventions for children with disabilities, and b) to examine the views of government officials and those from NGOs, on early childhood intervention policies and practices. This current study sought to address the following research questions:

- What are the current practices for the provision of early childhood intervention services for children and families of children with disabilities?
- What are the opinions of government and NGOs officials on early childhood intervention policies and practices?

Method*Participants*

The participants of the study were selected through a purposive sampling technique (Patton, 1990). This is a strategy where the inquirer selects individuals and sites for study because they can purposefully inform an understanding of the research problem and central phenomenon of the study (Creswell, 2007). Nineteen participants took part in this study. The participants were divided into two groups. The first group consisted of nine policy makers from the Division of Special Education in the Ministry of Education and Skills Development (MoSED). The second group consisted of ten coordinators from NGOs providing special education services. Out of 19 participants, 10 were trained in special education, and the remaining nine specialized in related services. Therefore, the participants provided rich information on early childhood intervention services in Botswana. Table 1

provides the professional and personal backgrounds of the participants.

Research Design

An exploratory qualitative research design was used in the study. Qualitative approach was used because it allowed the researchers to gain an understanding of the policy background and to uncover different experiences and perspectives of the participants on the issues of early childhood interventions in Botswana.

Research Setting

The study was carried out in urban and semi-urban locations in Botswana. These included public schools and centers run by NGOs that provided services for children with special needs, such as The Botswana Red Cross Society and Cheshire Foundation.

Data Collection Procedures

Data were collected using one-on-one interviews to capture the views and perspectives of early childhood intervention policy and services in Botswana. A semi-structured interview guide was used specifically for this study to gather information about the provision of early intervention services. Semi-structured interviews consist of several key questions that help to define the areas to be explored, but also allows the interviewer or interviewee to diverge in order to pursue an idea or response in more detail (Gill, Stewart, Treasure & Chadwick, 2008). A total of 19 policy makers and NGO officials were interviewed. Permission to interview was sought from the participants. The interviews were conducted at the participants' offices at a time convenient to them and all interviews were audio-taped. Interviews lasted between 45 and 60 minutes and were conducted in both the local language (Setswana) and English to allow the participants to express themselves freely.

Data Analysis

Data were transcribed verbatim. The transcripts were scrutinized to gain familiarity with the data (Creswell, 2007). After multiple readings, the transcripts were segmented and then coded into categories to form descriptions and broad themes (Creswell, 2007; Johnson & Christenson, 2004) through the use of 'patterned coding' (Miles & Huberman, 1994). These themes were supplemented

with short quotations to illustrate the context related to early childhood intervention in Botswana. The transcripts were later given back to the interviewees: a) for 'member check' exercise, b) to solicit for more information, and c) for clarification of some issues that were raised during the interview, which needed further clarification.

Results

The purpose of this study was to investigate the extent to which educational policies in Botswana addressed early childhood interventions for children with disabilities and to examine the views of government officials and those from NGOs on early childhood intervention policies and practices. Three themes emerged and are discussed below.

Policies Concerning Early Childhood Intervention

From the responses of the participants it was evident that they believed that both the RNPE of 1994 and the early childhood education and care (Government of Botswana, 2001) currently underpin special education policy and practice, including early childhood intervention, in Botswana. Three issues emerged from the interview data regarding these policies. First, some participants pointed out that there was no specific policy on special education and they were therefore only guided by the RNPE. As one of the participants remarked:

There is no specific policy on pre-primary as yet, I am not aware of any...Eeh, what we have is the RNPE which came up with two broad recommendations, REC 9 & 11 which are on standards for facilities and the quality of program...in any case, we would not have a specific policy ...rather, it would be an inclusive policy that looks at all areas of special needs including pre-primary. (Govt. Off. 4).

On the issue of policy, some participants from NGOs reported that they knew very little about policies. This finding came as a surprise because most early childhood intervention services in Botswana are provided by NGOs. It was equally interesting to find that none of NGOs had a copy of the policies. To verify this issue, one of the participants said:

We have been advised by the special education office to have copies of the policies...but you know managers come and go and usually when

one leaves you then don't find some of these important documents. (NGO Off. 2)

However, the policies were well known to staff in the MoESD since they used policies as a point of reference for their day-to-day activities. On the same note, when asked about specific policy on early childhood intervention for children with SENs, some officials were not sure about the existence of such.

Current Practices in Early Childhood Education

While there is evidence of the provision of early childhood education and care practices, the quality and accessibility of such programs remained a challenge in Botswana. As pointed out earlier, many children with disabilities were not accepted by these centers due to lack of resources, qualified special education pre-school teachers, and limited spaces. Lack of collaboration between government departments posed yet another challenge to the smooth running of early childhood education and care programs. The following subthemes emerged under current practices and are discussed.

Challenges Surrounding the Provision of Services

Although, the Department of Pre-Primary and Primary Education is responsible for early childhood education services, the provisions for early childhood intervention for children with SENs are manned by NGOs. This clearly indicated that government was not ready to take responsibility of educating younger children with disabilities and thus, found it difficult to convince the existing centers to provide services to children with disabilities. These centers also gave excuses such as lack of proper facilities, trained personnel, and resources in order to exclude this population. Illuminating the issue, one participant said:

Most of the registered service providers do not accept children with disabilities because of limited space at their facilities and also that they do not have specialist teachers at those centers... at the moment we are still encouraging them. (Govt Off. 3).

Some participants considered that their current role of providing advice and support to government departments impeded their ability to develop initiatives to support children with disabilities. At the same time they did not have control over the budget. On the issue of funding one participant lamented:

We cannot do our mandate because as a Division of Special Education we still don't have a budget that we are controlling so it means we are going to be seen as advising and supporting, we can't come up with initiatives that are ours..... (Govt. Off. 5).

Lack of manpower was cited as another major challenge that the personnel within the Division of Special Education faced. For example, participants noted that this shortage made it difficult for them to have children identified as having a disability, and to also provide services for those that had been identified. As one of the participants noted:

We would need pediatric clinics which have got a multi-disciplinary approach to the identification of children, right now even hospitals are running short of staff in terms of Occupational Therapists, Physical Therapists, Speech and Language Therapists. These are scarce skills, they are not available. (Govt. Off. 1).

Access to Classes/Centers Providing Early Childhood Intervention

There was a general consensus among the participants that there was a limited number of early intervention classes/centers available for children with disabilities in Botswana and that they were mostly situated in the eastern part of the country and mostly in urban areas. In addition, it was also reported that the existing centers had limited space and facilities, therefore, those who sought admission had to wait for longer periods before they were admitted.

Findings revealed that there were nine centers that provided early childhood education programs for children with disabilities. Five out of nine of these centers catered for children with physical and intellectual disabilities and the rest focused on children with hearing impairments. Two of these centers were special classes in government schools, while the other two were in special schools run by a NGOs.

It is important to underscore that the RNPE (Government of Botswana, 1994) recommended that pre-primary units be located in the same premises as primary schools. However, in practice this has not been the case. As noted by two of the participants:

...there is no provision for early childhood program in government schools; those schools with pre-school units are just doing it on their own because the admission policy says the child

can only be admitted into primary when she/he is five and a half years old (Govt. Off. 6 & 8).

Identification and Referrals for Children with Disabilities

Children with disabilities were identified by rehabilitation officers, medical practitioners, families, or any member of the community (who may have knowledge about particular services) and referred to Central Resource Center for assessment before placing them in the early education centers. In addition, it was also found that family-support intervention program did not exist, and that all intervention services were usually accessed in the hospitals and other medical facilities. This was confirmed by one of the government officials who stated that:

...but in terms of identification, children are identified by the Rehabilitation Officers in the Ministry of Health, through the under-five clinic (maternal health clinics) and there could be other means of 'hearsay' information because some parents now are educated like ourselves (Govt. Off. 5).

Because of lack of appropriate services and facilities for children and parents, more often than not children with SENs experienced late identification which adversely affected their academic performance at school.

Coordination and Collaboration between Government Departments

Evidence from interview data showed that the participants verified that there was no coordinated inter-ministerial projects/program. For example, the Ministry of Health manages clinics for the under-fives but does not focus on children with disabilities. On the other hand, the MOESD has the Central Resource Center responsible for assessment and placement of children with SENs. There is usually less coordination and collaboration among these ministries and their departments thus making it difficult to clearly identify the one responsible for early intervention. This clearly indicates that service delivery is disjointed, which delays the processes of early intervention. While explaining this issue, one of the participants stated:

I strongly believe it is the Ministry of Health's responsibility to identify and refer children at risk. They should be the ones identifying children and then ensuring that there is a proper

transition from their Ministry into the Ministry of Education...I think we need visionary leaders to ensure that these things are taken seriously. (Govt. Off. 2).

On the other hand, the NGOs equally complained about the bureaucratic rules of the ministries that did not allow for independent initiatives. One participant from the NGOs (NGO-1) lamented that, "People have their own little policies in their own little departments where they are doing what they want to do".

Discussion

The objective of this research was to investigate the extent to which educational policies in Botswana addressed early childhood interventions for children with disabilities. We also examined the views of government officials and those from NGOs on early childhood intervention policies and practices. Data collected from one to one interviews were analyzed. In this section we discuss the findings.

Early childhood services in Botswana, as in many countries, include services as early as possible from three disciplines namely, health, social services, and education. The Ministry of Health's main focus is on primary health care strategy and the provision of other health related services. The Social Welfare Division, under Ministry of Health is primarily responsible for providing assistance to the government to formulate social welfare policy and improve the economy, socio-cultural, physical, and spiritual conditions. The early childhood education and care policy was the only policy that addressed issues of early childhood education as well as those of children with disabilities. We therefore, critically evaluated this policy.

The findings of this study indicated that although early childhood education and care policy existed, it was silent on issues about disabilities. Therefore, intervention provision for younger children with special needs was seriously lacking. It was also found that special education services and supports were guided by policies from three ministries (i.e., Health, Education, and Local Government) but there was no effective collaboration and coordination among these structures. As a result the service-delivery was highly fragmented as there was no sense of ownership and families of younger children with special needs did not receive appropriate services.

From the results of the study it was evident that the participants were aware of the existence of the educational policies that guided service-provision for all children. However, they were concerned about their silence on issues regarding early childhood

intervention. While early childhood intervention was recognized as important, participants were of the opinion that the role of government departments is limited to an advisory role, whereas the NGOs and private sector remained the main providers of early childhood services. As a result, the service delivery was highly compromised (Malatsi, 2009). This is not unique to Botswana. Similar situations are also reported (Kaul, Mukerjee, Ghosh, Chattopadhyay & Sil, 2003; Thornburn, 2003). These authors have indicated that early childhood intervention services are mostly operated by NGOs and Community Based Rehabilitation (CBR). It is therefore, not surprising that the needs of pre-school children with disabilities are not adequately addressed in Botswana.

The findings from this current study revealed that the NGOs offering special education were managed by professionals with differing backgrounds such as teaching, nursing, social work and speech therapy. This is in agreement with Albino and Berry (2013), who observed that early childhood development services in South Africa are mostly run by different professionals in health and education. Also, training of appropriate teaching personnel is made a lesser priority. Botswana is a developing country and therefore, some issues take priority over others. For example, issues of HIV/AIDS, poverty, and the provision of quality health, social welfare for all children including infants, and children were given priority over the training of personnel for service provision in early childhood intervention programs. Similar sentiments were echoed by Britto and colleagues (2014) who stated in their study carried out in East Asia and the Pacific, Kenya and Uganda from Eastern and Southern Africa, and Peru from Latin America that while there had been substantial growth in early childhood development services in low- and middle-income countries (LMICs), there was considerable inequity in their distribution and quality. They also stated that evidence-based governance strategies were necessary, but these strategies were insufficient for widespread, quality implementation. Charema (2012) also noted that although Botswana was financially sound and politically stable it still lagged behind as far as early intervention programs are concerned.

The results of this study also showed that the few early childhood intervention programs that existed were limited to certain locations. For example, the services were concentrated in the eastern part of the country and served mostly children with intellectual and physical disabilities. Unlike other early childhood programs, those for children with disabilities have attracted little or no interest from private service

providers. As pointed out earlier, the provision of early childhood intervention services is mostly by NGOs. Services are also not evenly distributed across the country. This has had an impact on service-provision. UNICEF (2005) has also verified that families especially from developing countries have limited access to quality early intervention programs and elementary schools that meet the needs of children with disabilities. Research has also shown that problems of access are aggravated by cost, transportation barriers, and hours of operation (Wall, Kisker, Peterson, Carta, & Jeon, 2006).

One other finding of this study was that specialist services such as physiotherapy, speech and language therapy, psycho-social counseling, and other related services were lacking. Participants noted that this lack made it difficult for early identification and intervention of children with SENs. In support of this view Chitiyo and Chitiyo (2007) noted that the shortage of qualified professionals in the area of special education was a major threat to the provision of special education in southern Africa. It is also noteworthy that service providers (NGOs) served mostly school-going children rather than younger ones. This clearly shows that the provisions of early childhood intervention services are minimal. Some possible reasons might be that NGOs may not have realized the benefits of early intervention or are constrained by resources. These findings are in accordance with Mpuang (2009) who argued that resources were an inhibiting factor to service provisions for learners with disabilities.

A key factor in ensuring that children with disabilities are provided with adequate service is that their support needs are recognized and attended to. However, challenges of service provision for children with disabilities in Botswana have been the absence of monitoring and evaluation practices (Hopkin, 2003). Hopkin (2003) highlighted that the provisions for children with SENs were not adequately addressed because of the ever-tightening budget. Additionally, Kisanji (2003) stressed that if children with disabilities were to be included in the educational system in a meaningful way, then educators, policy makers, and planners must collaborate.

One of the core principles of the developmental systems approach of early intervention is the coordination and integration of agencies, services, and personnel (Guralnick, 2005). Children with disabilities or those who are at risk of disability have varying disabling conditions that often require the services of personnel from different fields with different backgrounds and training. Therefore, program coordination depends on partnerships between parents

and professionals and between professionals and teachers. According to Bruder and Dunst (2008) collaborative efforts enable parents and service providers to efficiently locate and manage the varied resources, support and services required by a family. Nevertheless, it is important to underscore that integration and coordination of various early childhood intervention service providers are complex and multifaceted therefore diverse perspectives are expected (Stayton & Bruder, 1999).

Recommendations and Conclusions

This study revealed that there is a gap between policy and practice as far as the early childhood education and care policy is concerned. The policy and programs have demonstrated that the limited service providers, funding mechanisms, programs, and services for children with disabilities create a disjuncture and complexities for the consumers of such services. This is particularly evident from the limited collaboration and coordination among service providers. The diversity in programs and administrative structures arising from the involvement of various government departments and NGOs have also indicated inadequate effort in making the community more inclusive. The provision of early childhood intervention services have been interpreted differently by various departments and that has resulted in fragmented service-delivery. In order for policy to be in line with practice, it is important that the existing structures be closely coordinated and monitored to ensure effective implementation of programs agreed to by all stakeholders. We therefore, recommend that all stakeholders responsible for the formulation of policies should formulate a multisectoral policy that addresses all the above-mentioned issues.

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University and Community College Education Programs Partnering to Enhance Standards-Based Paraeducator Training

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Abstract

Given that paraeducators are increasingly utilized to deliver special education services, the need for their quality preparation has come to the forefront. The authors address how standards set expectations for appropriately trained paraeducators through the use of specific knowledge and skills, offer a process for revising an existing preparation training program to reflect a standards-based program, and conclude with recommendations for implementation. This article describes the efforts of a university and community college partnership in the United States with the goal of improving the existing community college program for paraeducators by mapping curricula to the Council for Exceptional Children (CEC) paraeducator standards and revising curricula to adequately prepare students to address the needs of children with disabilities.

The call to improve student learning via standards-based instruction, curriculum alignment, data-based decision making, and other research-based initiatives are expected of educators in Kindergarten through Grade 12 (K-12) school and higher education settings in the United States. The standards and accountability movement gained popularity in the 1990s and at the K-12 school level (Arends, 2012; Beecher & Sweeny, 2008; Sobel, Taylor & Anderson, 2003). At higher education levels, teacher education programs are seeing historic and ambitious national accreditation standards for educator preparation. Having confidence in advancing the field has led professional organizations to develop and approve the profession with accreditation standards that seeks to improve and support educators through the application of rigorous standards (American Association of College for Teacher Education [AACTE], 2013). In recent years, the Council for Exceptional Children (CEC), the renowned leader in special education personnel standards, developed preparation standards for special education teachers and paraeducators (Council for Exceptional Children [CEC], 2009, 2011).

Paraeducators, alternatively known as paraprofessionals, instructional assistants, educational assistants, teacher's aides or teacher assistants, support teachers in

providing instruction to students in schools in many countries. In the United States, paraeducators are now prominently recognized as an integral part of the instructional process and critical supports for students with disabilities in K-12 school settings. Paraeducators provide direct services that include: instructing small groups, adapting instructional materials, implementing behavioral management plans, assisting in the implementation of postsecondary education transition plans, and collecting data to monitor children's development and learning (Chopra & French, 2004; Chopra, 2009; Chopra, Sandoval, & French, 2011; Downing, Ryndak, & Clark, 2000; French & Chopra, 1999; Marks, Schrader, & Levine 1999; Wadsworth & Knight, 1996).

The role of the paraeducator has changed dramatically in recent years. These individuals were once thought of as clerical aides, completing routine tasks for which very little training was necessary (Chopra & French, 2004; Chopra, 2009; French & Pickett, 1997; Haselkorn & Fideler, 1996; Marks et al., 1999; Minondo, Meyer, & Yin, 2001). Today's paraeducators provide instructional support and spend most of their workday providing direct instruction, facilitating activities individually or in large or small groups, collecting data, providing supervision, personal care, translating/interpreting, bridging

cultural gaps, and performing essential clerical tasks (Chopra 2009; French, 1998; French & Chopra, 1999; Marks et al., 1999; Pickett, 1989; Wadsworth & Knight, 1996). Documented reports on the role of paraeducators stress that parents also regard them as important links between families and schools, between students and teachers, among students, and between the community as a whole and the schools (Chopra, Sandoval-Lucero, Aragon, Bernal, Berg de Balderas, & Carroll, 2004; French & Chopra, 1999). Over the year, survey results have informed the development of prioritized paraeducator duties. A Time/Activity Analysis documented the number of minutes per week that paraeducators spent in various activities. The top five duties in rank order are: 1) one-to-one instruction, 2) small group instruction, 3) large group instruction, 4) data collection, and 5) preparation/planning. More recently, several studies have confirmed instructional duties as the primary responsibilities of paraeducators (Carter, O'Rourke, Sisco, & Pelsue, 2009; Fisher & Pleasants, 2012; French, 1998; Westat, 2002).

Despite the critical roles that paraeducators play in the lives of children with disabilities in the United States, limited attention has been paid to ensuring that paraeducator preparation programs adequately prepare paraeducators to serve children with disabilities and their families (Chopra, Banerjee, DiPalma, Merrill, & Ferguson, 2013; French & Chopra, 1999; Giangreco, 2010; Kellegrew, Pacifico-Banta, & Stewart, 2008; Mikulecky & Baber, 2005; Office of Special Education Programs [OSEP], 2009, 2011; Shkodriani, 2003). While the Individuals with Disabilities Education Act (IDEA) recommends and allows the use of "appropriately" trained paraeducators (IDEA, 2004), it provides vague and limited description of what paraeducator training entails. Overwhelmingly, it is left to the states and local education agencies to interpret the statutes and regulations in terms of qualifications and utilization of paraeducators (Mueller, 2006). Recognizing this gap, the CEC first created K-12 special education paraeducator standards in 2004 and recently revised them (CEC, 2004, 2011). While the CEC standards help set expectations for appropriately trained paraeducators and can be used to guide their preparation, many of the certificate or associate degree programs at community colleges that prepare paraeducators have not yet aligned their programs to these standards (Chang, Early, & Winton, 2005; OSEP 2009, 2011).

Responding to this need, the Office of Special Education Programs (OSEP), within the U.S. Department of Education established a funding priority to support projects that focused on improving preservice programs for paraprofessionals who serve

children ages birth through five and in grades K through 12 by enhancing or redesigning curricula to adequately prepare these paraprofessionals to address the needs of children with disabilities (OSEP, 2009, 2011). This article describes the efforts of a project funded under this priority that involved a university and community college partnership with the goal of improving the existing community college program for paraeducators by mapping curricula to the CEC paraeducator standards and revising curricula to adequately prepare them to address the needs of children with disabilities.

Setting the Context

The Partners

The University of Colorado Denver (UCD) collaborated with the Colorado Community College System (CCCS) that oversees 13 community colleges to use the CEC K-12 paraeducators standards to revise the K-12 paraeducator programs. The School of Education and Human Development (SEHD) at UCD, situated in downtown Denver in the state of Colorado in the United States, is committed to joint efforts with other institutions of higher learning, community agencies, and schools to improve educator effectiveness. The SEHD is steadfast in responding to changing directions in educator preparation and school reform. Attempting to address gaps noted above, the Paraprofessional Resource and Research Center (PAR²A Center) at the SEHD submitted a proposal which was funded by the Office of Special Education Programs (OSEP) at the US Department of Education, to revise and strengthen paraeducator preparation with standards-based curricula. The objectives of the Preparation of Paraeducators (PreP) project included:

1. To align existing paraeducator pre-service programs across the Colorado Community College system with national standards.
2. To train community college faculty to deliver the revised program.
3. To utilize current networks accessed by community college admissions and recruitment specialists to recruit pre-service paraeducators into the new programs.
4. To train mentor teachers in paraeducator supervision techniques.
5. To create career pathways for paraeducators.

The Colorado Community College System (CCCS) is Colorado's number one source of higher education access and opportunity and comprises the state's

largest system of higher education. Its career and academic programs in the 13 state community colleges serve more than 117,000 students annually across urban, suburban, and rural areas of the state, ensuring educational opportunity and access. In addition, the CCCS oversees 1,200 secondary and 800 postsecondary career and technical programs in more than 150 school districts and seven other postsecondary institutions across the state. The mission of the CCCS is to provide an accessible, responsive learning environment that facilitates the achievement of educational, professional and personal goals by their students and other members of their communities in an atmosphere that embraces academic excellence, diversity, and innovation. In this spirit of access and equity, the system offers many accommodations to make college affordable for students from all backgrounds.

The Guiding Framework

The CEC organization believes in equitable access to and meaningful participation in quality educational opportunities for individuals with exceptionalities. Their dedicated efforts to work with policy educators and legislators at all levels to develop programs, policies, and initiatives help to ensure students with disabilities and/or gifts and talents from diverse cultures receive high quality educational services. To ensure that paraeducators have the required skills to meet the challenges in today's classrooms, CEC (2011) validated the paraeducator performance standards, which articulate the knowledge and skills that all paraeducators serving individuals with exceptionalities should possess. Our team chose to use the paraeducator standards as a foundation for the curricula review process. Those standards are organized by 10 broad areas: Foundations; Development and Characteristics of Learners; Individual Learning Differences; Instructional Strategies; Learning Environments and Social Interactions; Language, Instructional Planning; Assessment; Professional and Ethical practice; Collaboration. Each category is supported by accompanying knowledge and skill statements.

The Review Process

With the comprehensive CEC paraeducator standards as a guide, the participatory and collaborative processes spanned a series of four phases.

Phase 1: Development of the syllabi review process. Our work began with convening a group of

experts in the field of special education to craft plans for revising the community college paraeducator curriculum. The panel included three national experts on the use of paraeducators in special education, one local faculty member with expertise in special education, and two faculty members that serve as the Teacher Education Department Chairs from the local Community College system. The expert panel discussed the work and agreed that using the standards was paramount to this professional development undertaking.

After lengthy conversations about the wording and intent of the standards, the panel agreed that they needed a tool to document and track curricula revision work.

To guide our work, the team created a planning matrix to crosswalk between the CEC standards and the paraeducator pre-service coursework to ensure that the content contained evidence and competency based practices. The planning matrix included a comprehensive listing of all ten categories and accompanying knowledge and skill sets, a rating code, and space to document typical syllabi components (i.e. course objectives, syllabus, readings, assignments, quizzes, and assessments). A rating code was used to indicate the level to which the knowledge and skill components under each standard were addressed across different components of the syllabus. The code included: I = Basic introduction of content in this course; K = Comprehensive knowledge based in this course; A = Demonstration of competency assessed in this course; and NA= Not Addressed. Table 1 provides a snapshot of just one knowledge and skill statement within the "Foundations" category.

Phase 2: The review. Community college faculty and key project staff were instrumental in securing resources for a comprehensive review (e.g. requests for additional materials, texts, conversations with individual instructors, compiling information in the matrix, etc.). Six syllabi representing the core paraeducator certificate program (see Table 2) were initially reviewed for content, coherency, and comprehensiveness across each CEC knowledge and skill standard. Two additional syllabi, though not part of the core but existing in the CCCS catalog, were added to the review to address gaps that were revealed in the initial review. Members from the expert panel worked in pairs over a six-week period to complete the matrix for all assigned courses. Pairs collaboratively discussed points of clarification, negotiated, and came to agreement. Lengthy time was spent clarifying the distinctions between "knowledge" and "skills" among the reviewers. For example, reviewers agreed that items within the "skills" category included

Table 1

Syllabus Review Template: Standard 1: Foundations

| | | | | Standard 1: Foundations | | | |
|-----------|---|--------------------------|------------------|------------------------------------|-------------------|-----------------------|--|
| Knowledge | Course Objective (Yes/No) | Current Syllabus (I-K-A) | Readings (I-K-A) | Assignments and Activities (I-K-A) | Name of Artifacts | Other Instructor Info | |
| PK1 | Purposes of supports and services for individuals with exceptionalities | | | | | | |
| | Skills | | | | | | |
| P1S1 | Use basic educational terminology | | | | | | |

Table 2

Core Paraeducator Certificate Program Courses

| Course | Description |
|--|---|
| Initial Review | |
| EDU 221: Introduction to teacher education | Focuses on the historical, social political, philosophical, cultural and economic forces that shape the public school system. |
| EDU 234: Multicultural education | Focus on the need to recognize and understand similarities and differences among people and integrate multicultural diversity teaching into curriculum. |
| EDU 240: Exceptional children | Focus on the individual differences and modifications that are necessary in the educational practices of the exceptional learner. |
| EDU 261: Teaching, learning and technology | Prepares students to integrate technology into their teaching curriculum. |
| EDU 288: Field experiences | Provides students with the opportunity to supplement coursework with practical work experiences. |
| PSY 238: Child development | Provides an introduction to child development from infancy through adolescence, covering the major cognitive, physiological, emotional, and social changes that occur during this period. |
| Subsequent Review | |
| EDU 114: Behavior management | Focuses on areas of behavior instruction including contingency planning, observing and recording behavior, and supervision. |
| EDU 141: Basic instructional techniques | Focuses on delivering instruction, grouping students, reading with students, modifying instructional materials; and using technology, and adaptive equipment. |

Table 3

Standards-Based Course Analysis

| Standard categories | Number and % of knowledge statements addressed | Number and % of skill statements addressed | Gaps identified | Recommendations for addressing gaps |
|--|--|--|---|---|
| 1. Foundations | 5/5 100% | 4/4 100% | | |
| 2. Development and Characteristics of Learners | 5/5 100% | 0 | | |
| 3. Individual Learning Differences | 2/2 100% | 1/3 33% | P3S1: Friendships P3S3: Levels of support) | EDU 240 EDU 240 |
| 4. Instructional Strategies | 0/1 0% | 9/14 64% | P4K1: Evidence based practice P4S3: Self-assessment P4S4: Generalization P4S6: Transitions P2S7: Study skills | EDU 221 & 234 EDU 261 EDU 240 141 EDU 240 & 141 EDU 240 & 141 |
| 5. Learning Environments and Social Interactions | 2/2 100% | 11/13 85% | P5S1: Levels of support P5S8: Self-advocacy | EDU 240 EDU 141 |
| 6. Language | 2/4 50% | 5/7 71% | P6K2: Language levels P6K3: Culture of language use | EDU 234 EDU 221 |
| 7. Instructional Planning | 2/2 100% | 4/5 80% | P7S3: Time efficiency | EDU 141 |
| 8. Assessment | 1/1 100% | 2/2 100% | | |

(Continued)

(Table 3 Continued)

| Standard categories | Number and % of knowledge statements addressed | Number and % of skill statements addressed | Gaps identified | Recommendations for addressing gaps |
|--------------------------------------|--|--|---|---|
| 9. Professional and Ethical Practice | 2/4 50% | 5/13 39% | P9K1: Ethical practice P9K4: Professional growth P9S3: Health and safety P9S4: Timely information P9S6: Limits of role P9S8: Role of teacher P9S9: Chain of command P9S10: Skill limits P9S11: Competency P9S12: Feedback P9S13: Reflection | EDU 221 EDU 221 EDU 240 EDU 238 & 221 EDU 221 EDU 221 EDU 221 EDU 221 EDU 221 EDU 221 EDU 221 |
| 10. Collaboration | 2/3 66% | 3/5 60% | P10K3: Roles P10S1: Policies P10S5: Problem solving | EDU 221 EDU 221 EDU 221 |

proficiencies that we needed to see exhibited or demonstrated.

Phase 3: Results of the review. A close examination of the syllabi using the matrix review form revealed gaps and overlaps between knowledge and skills within the ten standards. This analysis was essential in informing needed course revisions to ensure syllabi included evidence of all standards across the paraeducator certificate program.

As revealed in Table 3, the existing syllabi adequately addressed all knowledge and skill statements included within standards 1, 2, and 3 (Foundations; Development and Characteristics of Learners; and Assessment) and the knowledge statements in standards 2, 5, and 7 (Individual Learning Differences; Learning Environments and

Social Interactions; and Instructional Planning). Gaps in the knowledge area were noted in four standards: Instructional Strategies (1 statement); Language (2 statements); Professional and Ethical Practice (2 statements); and Collaboration (1 statement). This review found that while six of the ten knowledge standards were met, the panel revealed less coverage in the areas of skill demonstration. Specifically, gaps were revealed in seven of the ten skill standards. As gaps were exposed, some overlap of knowledge and skill statements were evident across syllabi and those redundancies were determined to be appropriate by the team. For example, readings and assignments for the EDU 221 and 240 syllabi addressed multiple knowledge and skill statements in standards 1, 2, and 3.

Following the identification of the gaps, the team focused their attention on how to fill the identified gaps. As mentioned earlier, the team made a collective decision to revisit two existing courses in the catalog and recommended that EDU 114: Behavior management and EDU 141: Basic instructional techniques be added to the core plan of study as the inclusion of that content was essential to provide a comprehensive standards-based program.

Phase 4: Planning for the next steps. Much was learned from the review process and multiple efforts were immediately addressed with others underway. As the team worked their way through the standards review, conversations focused on individual interpretations of particular standards. Analyzing syllabi called for reviewers to scrutinize the wording in standards to ensure that all panel members had a common understanding. The panel worked through those differences, and compiled a list of the statements they found ambiguous and provided that feedback with CEC standards committee members. We were notified that our feedback informed changes to the language in the CEC standard document. Additionally, reviewers found that several syllabi lacked consistency and detail, although essential course information was obtained through conversations with course instructors, the panel made unified recommendations for support with syllabus construction. To address the issue of syllabi inconsistencies, the team collaboratively constructed a syllabus template that is now required by all instructors across the entire Community College network.

Original project plans called for a series of workshops for community college faculty to deliver the redesigned standards-based curricula; however, the work invested in communicating with faculty as we secured course materials taught us that those initial plans for faculty training needed to be revisited. It became clear that due to scheduling demands and personalized needs, university faculty needed to be flexible and responsive to individual instructor needs if real partnering was to happen. Hence, plans are underway to work individually with community college faculty as opposed to structured professional development. One-on-one collaborative consultations with lead course instructors will focus on personalized supports to address the gaps identified in this review.

The project partners recognize the need for articulation between the coursework at two-year and four-year institutions that provides seamless transition for those paraeducators who wish to pursue teaching careers. Project staff in collaboration with the CCCS and the program lead for the Bachelor of Arts program in Teaching, Learning, and Development at the SEHD

will develop a model program plan of study for paraeducators interested in pursuing a teaching license with an emphasis in elementary and special education. We will create representative program plans of study that pay close attention to paraeducator training requirements to ensure that participants are postured to take advantage of the existing Colorado guaranteed transfer agreement between community colleges and university organizations.

Discussion

We learned several valuable lessons during the CEC standards-based curriculum review and alignment process described above that we want to highlight for the benefit of others interested in pursuing similar work. Using course syllabi, panel members were able to access the degree to which the professional standards were addressed. The intricacies and ambiguity of wording in the standards led to deeper conversations about the demands of accountability with course content, historical perspectives regarding “what instructors have always taught” versus what they should be teaching, and the complexities of on-campus work and field-based experiences. Time spent engaged in these important conversations contributed to a genuinely collegial atmosphere helping faculty at two and four year institutions cross boundaries that traditionally have been in place. Committed time to engage in lengthy discussions allowed all stakeholders to negotiate and listen, which was essential for genuine partnering. Supporting course revision efforts across a program and across institutions requires a respectful commitment illustrated by a willingness to respond to changing agendas and scheduling demands. For others looking to engage in substantive program review work, we strongly recommend stipends be budgeted for, as the realities of curricular revision time commitments warrant compensation.

The 1997 and 2004 reauthorization of IDEA stipulated that paraeducators should be “appropriately trained and adequately supervised.” Yet, neither the law nor the regulations provided specifications for ‘appropriate training’ and ‘adequate supervision’ that the state and local education agencies could use as guidelines for the qualifications as well as utilization of paraeducators. The revised CEC standards for paraeducators set expectations for appropriate training through the use of specific knowledge and skills identified under the ten categories that comprise the paraeducator standards (CEC 2011). These standards should be used to guide needed professional development. Beginning with examining and

discussing what those knowledge and skills expectations mean is an essential professional development activity for teacher educators, administrators, teachers, and paraeducators.

Calls for educator accountability have been loud and clear coming from university and school leaders, policy makers, and profoundly concerned parents and community members. The current context and conditions of educator accountability requires an increased body of evidence of educator performance skills, yet the issue is not about the quantity of evidence but rather the quality (Beecher & Sweeny, 2008; Sobel et al., 2003). Because of the critical role paraeducators play in supporting students alongside the educators, expectations for quality of their preparation are imperative (OSEP 2011). Standards not only ascertain high quality preparation but also point way to establishing levels of mastery and methods to document individual competencies for paraeducators (Killoran, Templeman, Peters & Udelli, 2001). Without a purposeful, cohesive, standard-based curriculum, training efforts for paraeducators are shots in the dark (French, 2003). Ensuring that professional standards serve as the foundation for curricular development and revisions is essential in ultimately guiding an assessment of all educators including paraeducators.

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Explicit Content Enhancements to Facilitate Learning of Academic Skills with Students with and without Disabilities

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Students with high incidence disabilities (i.e., specific learning disabilities, emotional disturbance, intellectual disability, etc.) exhibit impairments in the areas of attention, memory, perception, processing linguistic information, and reasoning that affects their ability to learn. Hence, the ability to design and deliver explicit, enhanced instruction is fundamental for facilitating the acquisition of academic skills with this population. Within the direct instruction model, explicit enhancements occur during the “new material presentation” by the teachers. In this article, eight tools/strategies that teachers can use to explicitly enhance the content to facilitate the learning of all students are briefly provided along with specific guidelines to implement two of the strategies: graphic organizers and guided notes. Teachers can use these tools/strategies independently or multiple tools/strategies can be integrated to facilitate students’ acquisition of new content. Some of the enhancement tools/strategies can also be used during student directed activities; however, they are more effective when teachers explicitly model the strategy before students use them independently.

1. *Graphic organizers/ non-linguistic representations.* A graphic organizer (GO) is an evidence-based strategy that helps teachers to organize and present information in a structured manner using visual displays (Dye, 2000). There are multiple types of graphic organizers. Some common ones are (a) semantic webs/main detail/top-down graphic organizers, (b) Venn diagrams/compare-contrast graphic organizers, (c) sequence/time-line graphic organizers, and (d) diagrams. The purpose of semantic webs is to help with understanding and organization of hierarchical relationships between main ideas and details. The purpose of Venn diagrams is to help understand the similarities and differences of critical attributes of two or more concepts, events, ideas, etc. The purpose of sequential graphic organizers is to help understand the cause and effect relationships or a timeline of events. The purpose of diagrams is to help with the display of information and can include pictures, maps, charts, etc.

There are essentially four steps in creating an effective GO. First, one needs to identify the purpose/objective of what is being taught. The four

major purposes are (a) to list/describe the main ideas and details, (b) to compare and contrast two or more concepts, (c) to provide a time line of events and, (d) to label or display relationships. Second, one needs to identify critical information that the students need to learn. The amount of information presented should be around 15-18 major concepts/ characteristics/ details. Third, one needs to arrange the concepts/information using an appropriate type of graphic organizer. The appropriateness depends on the lesson purpose/objective. Finally, the teacher should decide whether to provide completed, partial, or blank GOs for the students when presenting the material and develop student GOs. For example, consider a teacher’s objective to teach the students about the two major types of cells as part of a unit on cells. The four steps to develop a GO are as follows:

- *Step 1:* Define the instructional objective/purpose. The purpose of the lesson is to define and list the characteristics and examples of prokaryotic and eukaryotic cells. (Other possible purposes could be comparing and contrasting the two major types of cells or listing the components of each cell type).
- *Step 2:* Read and select 15-18 concepts/facts. The number of concepts is based on students’ prior knowledge, abilities, etc. Typically, 15-18 concepts will help facilitate the learning of all students (including students with disabilities who have attention and memory issues).

I. Prokaryotic cell

A. Definition: Genetic material is not membrane bound

B. Characteristics

1. Usually unicellular
2. One chromosome
3. Absence of nucleus
4. Smaller cell size (1-10um)

C. Examples: Bacteria and cyanobacteria

II. Eukaryotic cell

A. Definition: Membrane-bound nucleus and organelles

B. Characteristics

1. Usually multicellular

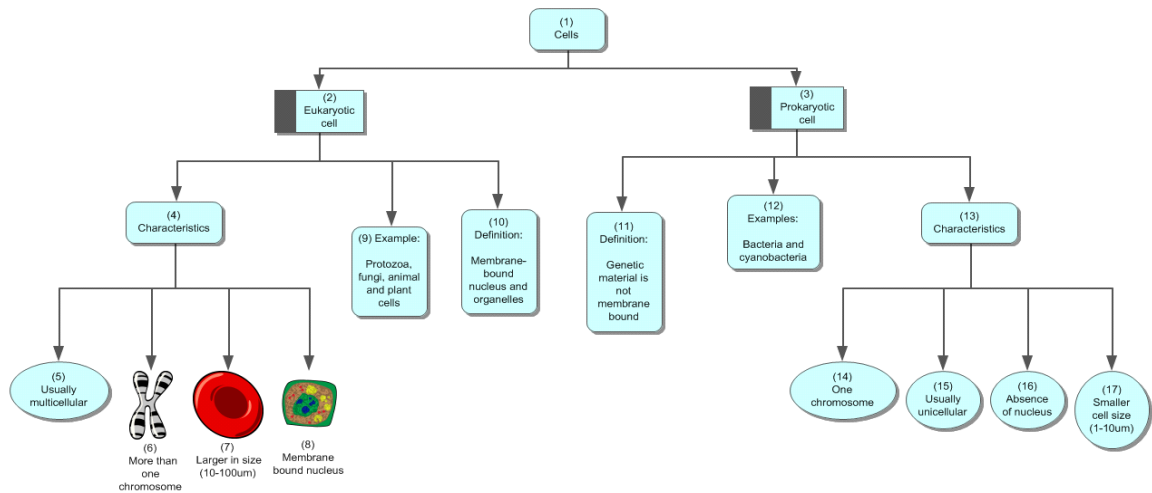


Figure 1. Main-detail GO

- 2. More than one chromosome
- 3. Membrane bound nucleus
- 4. Larger in size (10-100um)

C. Example: Protozoa, fungi, animal and plant Cells

- *Step 3:* Sketch the facts based on the objective (because the objective is to list and define, a top-down/main-detail GO is more appropriate (see Figure 1). If the objective/purpose is to compare and contrast the features of a prokaryotic and eukaryotic cell, then a Venn diagram is more appropriate. Similarly, if the purpose is to identify/label the components of each cell type, then a diagram would be more appropriate).
- *Step 4:* Developing partial/blank copies (by removing essential content) of the GO for students to fill in during the teacher's presentation.

2. *Guided notes.* Guided notes are teacher prepared lecture outlines with prompts/cues and space to write key facts, concepts, rules, and procedural steps (Heward, 2006). Carefully designed guided notes can actively engage students and thus enhance students' learning of concepts/information presented during teacher-directed lectures. Guided notes can be combined with other instructional strategies such as graphic organizers, diagrams, summarizing strategies to make them engaging and to enhance learning (Konrad, Joseph, & Itoi, 2010). Guided notes serve as an alternative to traditional note-taking and are very helpful to students who have difficulty with sustained attention and/taking notes.

There are three essential guidelines/steps for developing effective guided notes. First, teachers must identify the essential content/purpose of the presentation. Second, teachers should develop their presentation materials/outline with a focus on the important concepts that students need to learn (which is determined by the lesson objective). Third, teachers must develop students' handouts with important concepts/information deleted/removed from the teacher's outline. When developing students' handouts, teachers should make sure that the missing information is (a) equally distributed, (b) require students to write 1-3 words, and (c) provide adequate space for the students to write in the essential information. Further, teachers could provide various prompts/symbols on the students' handouts to indicate main ideas, supplemental information, practice work, homework, etc. Similarly, teachers can highlight the essential information in their outline through various prompts such as bold letter, underlined information, and changes in color to cue the students to record the information.

3. *Video enhanced instruction.* Videos, unlike print based materials, provide teachers with the ability to contextualize and deliver information using auditory and visual formats (Choi & Johnson, 2005). The visual and audio format of the video serves as a natural accommodation for students who have difficulty with reading and comprehending print-based texts. Videos capture student attention and thus facilitate learning. However, videos themselves are not effective unless students are actively engaged (Karppinen, 2005). Engaging strategies such as video guides and/or focused discussions during the pre-viewing, viewing, and post viewing stages can help engage the students and enhance students' acquisition of content. Hence, to design effective video-enhanced instruction, teachers

(a) need to have a clear purpose/objective of the content to be learned, (b) develop video guides that includes questions/prompts that students answer while viewing the video, and (c) a focused discussion of the essential content after the viewing of the video.

4. *Labs/simulations.* Labs and simulations are hands-on experiences that help with students' conceptualization of knowledge. For example, teachers can include science labs before or after the verbal presentation of laws of reflection and refraction. The hands-on experiences will (a) increase interest of the students and (b) provide first-hand experiences. Further, teachers should discuss the lab and provide opportunities to students to reflect on their experiences to facilitate the understanding of the content (Hofstein & Lunetta, 2003).

5. *Field trips/virtual field trips.* Field trips to museums, zoos, and similar places provide for direct interactive experiences. These experiences increase students' interest and help students to construct new understandings based on their interactions and background knowledge (Kisiel, 2003). Teachers can make the field trips more effective by undertaking pre and post-trip activities. Prior to the trip, teachers should prepare students by providing information on concepts or a focus of learning for the visit. Similarly, teachers should provide opportunities for students to review and reflect on their learning after the visit (Kisiel, 2006).

6. *Manipulatives.* Manipulative materials include real world physical objects such as base-ten blocks, counters, Cuisenaire rods, tangrams, place value mats, Unifix cubes, replication sticks (DNA), among others. They can also include virtual objects in computer-based environments to enhance conceptual learning (Bouck & Flanagan, 2010). Students construct their knowledge through the manipulation of concrete materials. For example, teachers can use chip trading mats with chips to teach place values (Haager & Klinger, 2005). Teachers should model how to solve problems using the manipulatives before students are asked to use them.

7. *Analogies.* Analogies involve mapping an unfamiliar new concept (i.e., target) to a known familiar concept (i.e., analog) (Glynn, 2007). By anchoring the new abstract concept to familiar experiences, this technique helps teachers make the unfamiliar, abstract information familiar to the students. Analogies can be used to enhance new concepts provided that familiar and unfamiliar concepts share the same features and students have direct experiences with the analog concept. By linking the new learning with something a student knows reduces the abstractness of the new knowledge

(target). An example of using analogies is teaching the concept of an animal cell or functions of cell organelle by using the middle grade students' knowledge of a factory (Glynn & Takahashi, 1998). In the above example, the teacher identifies key cell organelle and activates the middle grade pupils' knowledge of a factory. Next, the teacher discusses the similarities between the two concepts. For example, the teacher discusses that the role of managerial team that controls information/factory operations is similar to that of the nucleus. Similarly, the teacher points out the similarities of between production machines and ribosomes; power generators and mitochondria; conveyor belts inside the factory and endoplasmic reticulum; and delivery of finished products to warehouse outside of factory and Golgi apparatus (Glynn & Takahasi, 1998).

8. *Semantic Feature Analysis (SFA).* SFA uses a relationship matrix to activate and predict relationships between new and mastered concepts/words. When developing SFA, the main ideas are placed in columns on the top of the chart (for example, nucleus, membrane bound organelles, different cell organelle such as mitochondria, plastids, lysosome, etc.). The vocabulary or concepts are listed in separate rows (for example, animal cell, plant cell, bacteria, etc.). The teacher uses the matrix to discuss the concepts or vocabulary words and checks of the chart either positively or negatively based on the relation between the concept/word and the idea (Mastropieri & Scruggs, 2000).

Conclusion

Researchers in the field of special education have identified various critical components of explicit instruction that facilitate the learning of students with special instructional needs (Archer & Hughes, 2011). For example, in the explicit, direct instruction model, (a) teachers review pupils' prior knowledge, (b) present new material explicitly, (c) provide guided practice opportunities for pupils to acquire the content, and (d) provide independent practice opportunities to master the content (Archer & Hughes, 2011; Hollingsworth & Ybarra, 2009). Within the direct instruction model, explicit enhancements occur during new material presentation by the teachers. This article describes some explicit content enhancement strategies/tools that can help teachers deliver content in an explicit, unambiguous manner to students with and without disabilities. Teachers can implement the above tools/strategies independently or multiple tools/strategies can be integrated to facilitate students' acquisition of new content. Some of these strategies

can also be used during other phases of the explicit, direct instruction model. For example, students can create graphic organizers during guided practice to compare and contrast animal and plant cell after explicit instruction on the topic. Finally, it is important for teachers to constantly reflect on their implementation and effectiveness of the strategies in facilitating student learning.

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Inclusion in a Music and Movement Education Course

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This praxis article outlines an ongoing inclusive *Music and Movement in Education* two-credit undergraduate course initiated and facilitated by the author in 2012. It includes step-by-step strategies and suggestions to implement and advocate for an inclusion model in pre-service education or special education courses. The exploratory model is a required course within a two-year Associate Education Degree Program at Kingsborough Community College in Brooklyn (part of the City University of New York). Undergraduate pre-service education students (PSE) attending the course are completing their Associate of Science degree majoring in Early Childhood/Childcare or Education Studies. Included and auditing the class are young adults over the age of 21 with developmental disabilities. They are part of the college-wide Melissa Reggio Higher Education Program (MRHEP) and are supported by a mentor.

Overview

The course takes place over a 12-week semester, meeting for two hours per-week. It provides an inclusive environment in which students with developmental disabilities can contribute and participate fully in the course. Since the spring semester of 2012, two MRHEP students have audited a course section each semester. The PSE students contribute, participate, and potentially develop positive attitudes towards students with disabilities. The course section fills up ahead of time and includes on average 27 undergraduate pre-service teachers and two MRHEP students with a mentor: approximately 125 undergraduate students and 10 MRHEP students have experienced this paradigm thus far.

The Melissa Reggio Higher Education Program

The MRHEP is part of the wider organization AHRC (an organization serving individuals with intellectual and developmental disabilities throughout the five boroughs of New York City) and was established at Kingsborough Community College in 2008. The students from this program audit two undergraduate courses per semester. They also attend career exploration, independence, and self-awareness courses over a four year-year period before they

“graduate.” MRHEP students, as is the case with the majority of the undergraduates, reside in the Borough of Brooklyn and are of similar demographic backgrounds. Their ability to enjoy and function independently in the college experience is developed and encouraged.

Music and Movement in Education Outreach Philosophy

The goal of the music class is to instill confidence in all the students to enthusiastically lead music and movement activities with children. To do this, student teachers and MRHEP students need to have confidence as music-makers themselves. This is a simple idea but for some difficult to achieve. In the past, many students have come across the judgment of teachers, friends, family, among others, who have criticized them for being “off key” or that they “can’t keep a tune.” Out of this climate of judgment, many adults believe they are “not musical” and “can’t sing” (Carpenter, 2009). A different philosophy and approach is therefore taken in this course to counteract these ingrained assumptions.

At the core of this philosophy is the music outreach principle based on the work of Dr. John Diamond, a medical doctor and psychiatrist, who is the leading authority in the field of arts and health (for further information on the work of Dr. John Diamond go to: <http://www.drjohndiamond.com> and <http://www.musichealth.net>). In this system, the main criteria are to give music as a gift to others (Diamond, 2001) and to use music as a vehicle for communication and connectivity between people. The specific technical skills are not the focus. Music can be a vehicle for developing truly inclusive courses/environments and can be an ideal “vehicle for altruism” (Diamond, 1999, p. 60).

All students are given the opportunity to put the outreach principle into practice within the immediate classroom/workshop setting as well as in their field placements. The students are required to spend one hour a week in the field facilitating music activities with young children. The MRHEP students are expected, with support from their mentor to also fulfill this requirement. One MRHEP student returned to her own school to lead a music class while others have contributed to an intergenerational music outreach

program in a local nursing home and have led music activities in the college day care center.

Outcomes

All students within the *Music and Movement in Education* course are encouraged to support and help each other. It would seem obvious that the PSE students would assist and help the MRHEP students during the course. In essence however, it has been the reverse. So far, 80% of the MRHEP students that have audited the class have been enthusiastic and committed to the course and have become positive role models for the pre-service teachers. They, for example have excellent attendance, have been the first to come forward enthusiastically to ask and answer questions, or volunteer to demonstrate a song or a musical game. PSE students and the author have frequently commented on this. Therefore, the roles are reversed and those who are normally “helped” are empowered and become the “helpers” (West & Garber, 2005).

Initial Feedback from PSE Students

Ongoing and preliminary outcomes assessment so far has included open coded interviews, observations, discussions with mentors, and the two cohorts of students plus evaluations of a post-course questionnaire. This questionnaire is an anonymous feedback form regarding the course overall and included: Do you think including the students from the MRHEP was beneficial? If so how? Answers to these questions were rich and varied and revealed the changing attitudes of the PSE students. The following answers show that a specific PSE student’s attitudes changed and another PSE student wrote of her observation of the attitude of the overall class: “Absolutely I noticed that in the beginning most of the class was a little questionable about the students but as time went on everyone seemed to accept and enjoy them. Especially Jane. [smiley face icon]” “It helped because they showed courage and they made me think being different is positive. Always blending in the crowd is not important.” Responses that suggested that the students were aware of the MRHEP students being positive role models included: “Yes they are good examples to the rest of us.” “They were always active participators in class.” “Yes it showed us to fear nothing.” “I learned a lot from them.”

The following two examples suggest that the student was: a) aware of being able to put into practice the outreach principle immediately within the workshops and b) was concerned with the MRHEP student’s rights – “It was beneficial because we had

the experience to acknowledge if the techniques do work.” “Yes I think it was beneficial they should be able to learn the same as others.” Another student commented that the course was no different if the MRHEP students were there or not because all students were treated equally. Comments also suggested that in essence the PSE and MRHEP students were all the same; there was no inherent difference between them all. These last comments suggest that the PSE students accepted and understood the essence of an inclusive environment.

Initial Feedback from MRHEP Students and MRHEP Mentors

The MRHEP students recommend the class to their peers, and most remain in informal but regular contact with the author. Their positive feedback included: “I have enjoyed being part of the class; I felt I was accepted and respected in the class.” “It makes me feel relax whenever I’m feeling stress out about exams.” [sic].

Over the two years, MRHEP mentors have repeatedly communicated how popular the music education course has become and that there is a waiting list for their students to attend. The author noted that other sections of the course that she taught without the MRHEP students did not have the same enthusiastic and friendly ambience that the inclusive course section had. There was less interaction between students and the singing was not as loud or as wholehearted. Further in-depth analysis is necessary, including evaluation of a pre and post course questionnaires to fully understand the outcomes and benefits to both cohorts of students. There may be many factors that influenced feedback; however, all preliminary findings are positive.

Step-by-Step Strategies and Suggestions

1. Take time to evaluate whether the courses you are teaching are suitable, hands-on, and accessible. A purely theoretical or intensive writing course for instance would not be appropriate. This model was also used in a hands-on *Art in Education* undergraduate course.
2. Meet with the mentor before the start of the course regarding being a positive role model. In the music course they were expected to sing and be fully involved in the activities.
3. Discuss the inclusion model with the PSE students at the beginning of the course and point out that it

can be replicated in a school classroom. Emphasize their role in making the students who will be auditing the course feel welcome. Tilton (1996) affirms some of the goals of inclusion as: “fewer labels” and a “sense of belonging” (p.21).

4. Note that in this inclusion model MRHEP students choose to attend, while the pre-service undergraduates are mandated to take the course. Therefore the MRHEP students can positively change the dynamics and atmosphere of the class.
5. Involving and including students with developmental disabilities may be seen as “turning the tables” on what is considered important; i.e., what is given priority within a higher education institution: good grades, academic ability, intellectual prowess, among others. Inclusion encourages other important humanistic qualities including empathy, tolerance, and social bonding.
6. Model teaching that is respectful of all and addresses different learning styles. Put into practice within a college classroom what is being promoted and advocated for within a school classroom. “Walk the walk, talk the talk.”

Conclusion

Students with developmental and intellectual disabilities enrich courses and the college experience for all. This is an important concept to communicate in a college community as a whole. It is not a favor to students with developmental disabilities to include

them; it can potentially enrich the learning environment. This model has the potential to influence practices in both higher education and pre-tertiary schools. Student teachers who have been part of and experienced a positive inclusive environment will perhaps in the future, be more likely to create a truly inclusive climate within their own classrooms. The commitment and attitude of a teacher toward inclusion has been found to be a key factor in the success of inclusive practices (Shevin, 2007). As we look globally to an inclusive society we need to foster well-rounded, tolerant and civically engaged higher education and school-aged students. Inclusive practices within a pre-service education classroom course is surely timely, relevant, and beneficial to all.

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It Takes a Village to Viber: Using Technology to Promote Inclusion Around the World

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Inclusion of children with disabilities takes on various degrees in different countries, for example, the concept of inclusion in Germany is in its infant stage. A majority of students are still in segregated special schools (European Agency for Development in Special Needs Education, 2012); whereas, the United States mandates free and appropriate education in the least restrictive environment. One way to level the playing field is through mobile technology. In 2009, 6.1 trillion Short Message Service (SMS) messages were sent. Research shows there are 4.6 billion mobile phone subscribers across the globe (International Telecommunications Union, 2009). Moreover, mobile technology is portable, readily available, and user friendly. This serves as a catalyst to use mobile devices to include children with disabilities. Not only do most students have access to a mobile device but it has the potential to reduce some stigma of having a disability since the mainstream populations are using these devices.

Text tutoring can be implemented in any part of the world that has mobile devices with a Wi-Fi capability SMS device. The authors of this paper conducted a pilot study of text tutoring with teacher candidates in the United States and students in Germany and Ghana. While data were not extensive enough to warrant a report, they do support further research with the process described here. Installing and using Viber is recommended since it is free, available across

platforms, that is, iOS and android device friendly and user-friendly with a low learning curve. For this praxis paper, educators are provided instruction on how to set up text tutoring for students with disabilities.

What steps can teachers take to start text tutoring for students with disabilities? First, teachers should set up a Viber account to establish a common connection with students with disabilities. To do this, download and install Viber from <http://www.viber.com>. Once you have downloaded Viber, tap 'Continue' on the Welcome screen. Tap 'OK' or 'Allow' on the following pop up notifications: "Allow access to the address book". Then choose your country and type in your phone number with the cell prefix included and tap on 'Continue'. Within 60 seconds you will receive an SMS with an access code. Enter the access code in the Viber Setup screen and click on 'Enter Viber', once finished tap on 'Done' (Viber Media, 2012).

Using Viber, you can provide needed academic support through tutoring to a child with disabilities via text tutoring in any subject area such as math or English. Select a student having a mild to moderate disability to text tutor. Depending on your school's requirements, you may need to seek parent permission to use mobile devices in class. Once you obtain parental permission, schedule a training session for the parent and child to install, use, and practice using

Select Lesson #: 1 2 3 4 5 6 7 8

Select the subject area you are teaching:

Math English

Technology: Mobile Device

Select the mobile device you plan on using for this text tutor lesson

iPod iPad iPhone
Android Smartphone Feature Phone Laptop
Other

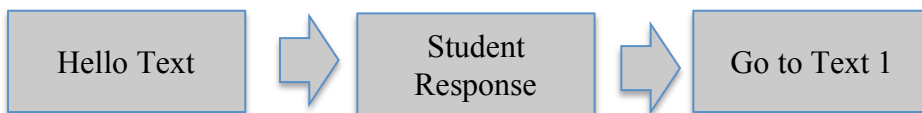


Figure 1. Text Tutoring Lesson Plan

Viber. Since many children use mobile devices, such as a cell phone, children are familiar with these mobile devices. This was true with students in Ghana and Germany. However, you should not assume this and a training session should be conducted. In addition, the teacher will need to develop a text tutoring lesson plan similar to the one outlined in Figure 1.

Text Tutoring Overview

Determine when and how the child will contact you to start the tutoring session. Depending on the child's age, you may have the child text, "Ready, go" or use an emoticon such as a "☺". The younger the child, the earlier the text tutoring session should be scheduled.

Next, send a welcome text, such as, "Hello, Denise, let's begin!" Determine what you will do if the child did not send you a text to start the tutoring session, such as, "Hello, Denise, ready?" Text the first question which can be in the format of fill in the blank or multiple choice.

Choose feedback for a correct response, for example, "Yes! That is correct, $1 \times 1 = 1$," or "Good job! $1 \times 1 = 1$." Remember to be consistent. This means for every correct response you should use the same feedback.

Decide the feedback for incorrect responses, for example, "Try again." This implies that you are allowing the child to have one additional attempt. Determine what you will do if the child responds incorrectly the second time. For example, "Sorry, the

correct answer is $1 \times 1 = 1$." You can also have no additional attempts. The feedback for an incorrect response should be consistent. In other words, if you allow the child one attempt each time for an incorrect response then all incorrect responses will receive one attempt.

Determine how you will end the session. For example, text "You are finished☺." You can also decide if you will inform the child of her progress, for example, "You got 7/10 correct—nice job!" Again remember to be consistent. In addition, you may want to base your feedback on the percentage correct. So, for example, "You got 100%-awesome!" or "You got 90%-way to go!" Be consistent, do not change the feedback meaning 100% is always "awesome", 90% is always "way to go" and so on.

Record the child's responses. Analyze the responses to determine if instructional change needs to occur in the tutoring, for example, if a child receives 100% each session on multiplying single digit numbers together consider having the child complete two digit multiplication numbers. Determine how you will share the tutoring session results with the parents, such as, texting the parent's mobile device or emailing them.

In summary, technology use, in particular mobile technology, can be used in many positive and productive ways in the classroom. According to Ullman (2010) the top three uses for cell phones in schools are for online research and Web browsing; consulting non-Internet references, like dictionaries;

and communications and social networking. Expanding the use of cell phones to assist with teaching and learning for students with disabilities is something educators should consider. Working collaboratively with parents by explaining the purpose of the text tutoring project, securing their permission, and providing continuous feedback on their child's progress will ensure sustainability.

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SUBMISSION GUIDELINES

The Journal of the International Association of Special Education

Articles that have not been previously published are not under review by any other publication and meet the IASE mission statement aims are invited for review. Both research articles and articles for practitioners will be given equal preference. Please indicate if this is a PRAXIS article.

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The aims of the IASE are to promote professional exchange among special educators all over the world, to develop special education as a discipline and profession, to encourage international cooperation and collaborative international research, to promote continuing education of its members by organizing conferences, and to foster international communication in special education through The Journal of the International Association of Special Education.

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Total length of the manuscript is not to exceed 20 pages and should include all references, charts, figures, and tables. Articles submitted should follow the guidelines of the Publication Manual of the American Psychological Association, sixth edition.

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The PRAXIS section of this journal is intended for readers to be able to immediately apply the methods/strategies described in the articles in their classrooms. These methods/strategies may be new and unique ideas or they can be effective methods/strategies that some teachers have been using and believe that by publishing them, many more teachers could implement them in their classrooms. The articles should be approximately three to six pages and describe in detail a specific teaching strategy or informal assessment method. The articles should include specific instructions on how to develop and implement the methods/strategies. The methods/strategies should require no unique materials for development. These articles are to be submitted following the same submission guidelines and will go through the same review process as all *The Journal of the International Association of Special Education* articles with the exception of including an abstract (*see submission guidelines*). The format for these articles should include an introduction, step-by-step directions, materials/examples of charts or graphs if needed, conclusions and references.

We encourage you to consider submitting methods/strategies that you have used with students with disabilities and think would be of interest to our readers. Both classroom teachers and university instructors are welcome to submit articles for consideration for publication in the PRAXIS section of the journal.

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Sunday, June 21, 2015

- 1:00-5:00 pm Conference Registration – Lobby of the University of Lower Silesia (Pick up your registration materials, drop Off silent auction items or Children/Adult art work)
- 7:00 -9:00 pm Opening Reception

Monday, June 22, 2015

- 7:00 am Conference Registration Opens
- 8:15 – 10:15 am Opening Plenary Session
- 10:15-10:30 am Morning Coffee Break
- 10:30-11:30 am Concurrent & Poster Sessions
- 11:30-11:45 am Transition Time
- 11:45-12:15 pm Concurrent Sessions
- 12:15-1:00 pm Lunch Buffet
- 1:00-2:00 pm Concurrent & Poster Sessions
- 2:00-2:15 pm Transition Time
- 2:15 -3:00 pm Concurrent & Poster Sessions
- 3:00-3:15 pm Transition Time
- 3:15-4:15 pm Concurrent & Poster Sessions

Tuesday, June 23, 2015

- 8:00-9:15 am IASE Membership Meeting
- 9:00-9:30 am Morning Coffee Break
- 9:30-10:45 am Second Plenary Session
- 10:45-11:00 am Transition Time
- 11:00-12:00 pm Concurrent & Poster Sessions
- 12:00-1:00 pm Lunch Buffet
- 1:00-2:00 pm Concurrent & Poster Sessions
- 2:00-2:15 pm Transition Time
- 2:15-3:00 pm Concurrent & Poster Sessions
- 3:00-3:15 pm Transition Time
- 3:15-3:45 pm Concurrent & Poster Sessions

CONFERENCE PROGRAM

Tuesday, June 23, 2015

| | |
|--------------|--|
| 6:00 pm | Bus Pick up for Transportation to Gala |
| 6:30-7:15 pm | Cash Bar |
| 7:15 pm | Dinner |
| 8:15 pm | Program |
| | Entertainment |
| | Live Auction |
| | Light Show |
| 10:00 pm | Transportation back to hotels |

Wednesday, June 24, 2015

| | |
|----------------|---|
| 8:00-9:00 am | Concurrent & Poster Sessions |
| 9:00-9:15 am | Morning Coffee Break |
| 9:15-10:15 am | Concurrent & Poster Sessions |
| 10:15-10:30 am | Transition Time |
| 10:30-11:30 am | Concurrent & Poster Sessions |
| 11:30-11:45 am | Transition Time |
| 11:45-12:15 pm | Concurrent Sessions |
| 12:15-1:15 pm | Luncheon Buffet |
| 1:15-3:00 pm | Closing Plenary Session |
| 3:30-5:00 pm | New IASE Board Orientation Meeting and Dinner |

Thursday, June 25, 2015

| |
|----------------------------|
| School Tours |
| Rehabilitation Center Tour |



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