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# The Journal of the International Association of Special Education

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## Note from the Editor

Welcome to the 2009 edition of *The Journal of the International Association of Special Education (JIASE)*. This is the fifth issue of The JIASE being supported in part for publication by the College of Education at Northern Arizona University (NAU) in Flagstaff, Arizona, USA.

January 30th of this year, Jamie Timmerman and I resigned as Managing Editor and Editor effective after this issue is published. This year I had to devote more time to journal issues not directly related to producing the journal. As a result of these challenges, I made editorial staff changes. I am grateful to Lynn Aylward who agreed to be the Co-Editor for this issue of the journal. I am also grateful to Jamie Timmerman, who having assumed responsibilities beyond those of Managing Editor agreed to become an Associate Editor for this issue of The JIASE.

In 2004 I was selected as the Editor of our organization's journal. I considered this to be an honor and a privilege, as well as a great challenge. I established many goals which reflected my understanding of the organization's philosophy and mission. Most all of these goals were accomplished due to the expertise and dedication of our Associate Editors, Consulting Editors, and Assistants to the Editors. Their tireless efforts made this the organization's journal. I have great admiration and respect for the many individuals (editors and authors) whose first language was other than English. Their participation makes this journal truly international. Of special mention are the contributions made by Gosia Sekulowicz. She has been an Associate Editor since 2005 and has consistently provided me with superb direction and guidance.

This journal is for our members and the organization. To quote a statement made by Mary Gale Budzisz, "IASE has always been a grass roots/people oriented organization which exudes warmth...providing a 'family-like' atmosphere. It has not been like any other organization to which I have belonged." I strongly agree with her statement and it is my hope that our professional journal has reflected this sentiment.

I would like to give my sincerest gratitude to all of the Editorial Staff, the Consulting Editors, Authors and NAU support staff involved in the successful publication of The JIASE over the past five years. Without everyone's effort and support, the journal would not have been such a success. In closing, I have found being Editor of the journal to be a rewarding, challenging and a most humbling experience. Thank you for the opportunity.

I hope to see many of you in Alicante, Spain in July. I am sure the 11th Biennial Conference will be a great success. Please see the IASE website (<http://www.iase.org/index.php>) regarding updated information on guidelines for publication and membership.

Kindest regards,

Greg Prater

# Current Trends in Special Education in Spain: Do They Reflect Legislative Mandates of Inclusion?

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## Abstract

*Over the past decades significant changes have occurred throughout all aspects of the field of Special Education in Spain. One of these changes is related to appropriate and effective instruction for students with disabilities and diverse educational needs in inclusive classroom placements. All of these change efforts have created the need to redefine the roles of regular and special teachers, as well as the services provided for students who may have special educational needs (SEN). This article uses national based data to investigate current trends regarding the inclusion of students with SEN in Spain. The data were examined in order to determine if there were significant variations regarding (a) the number of students with disabilities served in regular classrooms after the publication of PL 13/1982, Act on Social Integration of People with Disabilities, and (b) changes to the distribution of students with SEN by disability category and educational placement. The identified trends are discussed in the context of current legislation on inclusive schooling and special education.*

Special Education in Spain has a long thriving history. Initial initiatives can be traced back to the sixteenth century and were intended for children with sensory disabilities. Documents dating back to the 1500s report of physicians in Europe who worked with people who were deaf. The Spanish monk Pedro Ponce de León (1520-1584) is credited with being the first teacher of deaf students (Aguado-Díaz, 1995). He invented an oral method to teach his hearing impaired pupils to read, write, and speak, and by 1785 the first school for the education of the deaf-mutes was established in Spain. During the nineteenth century, schools and institutions of a purely charitable and aid-providing nature were set up for the education of people who were deaf or blind and for the care of those with mental illness. The segregation of people with disabilities in institutions providing fundamental aid and medical care went on well into the twentieth century, and the focus on rehabilitation and education was only slowly introduced. Professionals and the public shifted from a belief that people with disabilities should be shunned to the position that they should be protected, cared for, and instructed. After the civil war in 1939, the development of special education was left in private hands, which fostered the setting up of special education institutions (Palmero, 1996).

The questionable results obtained by segregated institutions, international normalization trends, as well as a growing social awareness at the end of World War II all led to a change in the educational treatment received by persons with disabilities. The change was embodied in PL 14/1970 [*Act on Education and Funding for Educational Reform* (LGE), 1970], which for the first time organized and formulated special education in Spain and stated as its goal training through appropriate educational treatment of all children and youth who may have special educational needs to support their integration into as full a social

life as possible. Special education was to be provided in special education schools, while at the same time the establishment of special educational units in ordinary schools was fostered whenever possible for those who had only mild disabilities.

After the death of General Francisco Franco in the late 1970s, Spain undertook a period of major reconstruction. Among other important political and socio-economic changes, new educational policies aimed to transform an educational system that until then had been selective and dual with its corresponding general and special institutions, curricula and legislation (Parrilla, 2007). The transformation goal was one integrative comprehensive educational system. The 1978 Spanish Constitution guaranteed all citizens' the right to education and urged public authorities to implement a policy of planning, treatment, rehabilitation and integration of people with physical, developmental, and cognitive disabilities in all social areas and, therefore, in education. The same year, the National Institute for Special Education drew up the National Plan on Special Education based on the principles of normalization, educational integration, and individualization, all of them formulated for the first time. The eighties and the nineties, however, witnessed a flurry of legislative activity that aided growth to special education in inclusive settings and to the transformation of a system incapable of satisfying the individual needs of all students (Parrilla, 2007). Progressively, many parents of children with disabilities and professionals agree that most students with disabilities should receive a substantial proportion of their education in general education classrooms alongside their nondisabled peers. And their education must be accompanied by an array of special services, supports, and curricular options that will meet their individual needs.

Three significant pieces of legislation dramatically affected the educational opportunities of children and youth with disabilities. All these regulations served as guidelines for the move from segregated educational placements to inclusive educational placements in a particular and significant way they include: (a) PL 13/1982, *Act on Social Integration of People with Disabilities* [*Ley de Integración Social de las Personas con Discapacidad* (LISMI)]; (b) PL 1/1990, *Act on General Organization of Educational System* [*Ley General de Ordenación del Sistema Educativo* (LOGSE)]; and (c) PL 10/2002, *Act on Educational Quality* [*Ley Orgánica de Calidad de la Educación* (LOCE)].

*Act on Social Integration of People with Disabilities*

LISMI (1982) was viewed as a “Bill of Rights” for children with disabilities and their families. As PL 94-142 in the United States, PL 13/1982 may rightfully be thought of as the legislative heart of special education. Before this law was enacted, students with disabilities were traditionally segregated from mainstreaming and provided special education services in special education schools or in self-contained special education classrooms. Inspired by the Spanish Constitution of 1978 (art. 27) as well as in the current World Declarations of Children Rights to Education, the purpose of this law was to assure that all students who might have special educational needs had available to them a free appropriate public education based on the principles of normalization, and integration in the least restrictive environment.

*Act on General Organization of Educational System*

In October 1990, Congress passed PL 1/1990, one of the most comprehensive pieces of legislation affecting children and the young with disabilities and their families. LOGSE (1990) marks the end of special education as a parallel educational system and introduces the concept of “special educational needs” through the influence of the Warnock report (Warnock, 1978). Under this law special education becomes a part of general education in a merging and unified educational system. Special education is no longer conceived as education for a different kind of students being defined as a process of adaptation to *diverse* individual educational needs. Its mission is to extend the core objectives of education to *all* students through adaptation and differentiation. As part of his/her individualized educational plan (IEP), any student with disabilities or who is gifted must have an individual transition plan (ITP). Another indication of the changes taking place in the 1990s is the incorporation of the term “inclusion.” Full inclusion represents the latest trend in meeting the requirement of providing an education for all in the least restrictive environment.

LOCE (2002) is probably the most significant civil rights legislation affecting individuals who have disabilities. The LOCE goes far beyond traditional thinking of who is disabled and embraces any individual who may experience disadvantage at school for any reason. This law defines special education as a process of school adaptation to individual and group differences (e.g., culture, language, ability, gender, social class) to make possible the principle of *equal opportunities* for all. From this view, difference is recognized as a natural variation with *participation* a key to achieve full inclusion.

The three laws were fundamental landmarks in the search for educational solutions and improvements for students labelled as “special education” pupils. They developed under the influence of major international seminars and workshops hosted by the United Nations, particularly under the United Nations Educational Scientific and Cultural Organization’s (UNESCO) activities (e.g., the *World’s Declaration on Education for All* in Jomtiem, Thailand, 1990, focused on integration initiatives and equity issues for all, and the *Salamanca Statement on Principles, Policy and Practice in Special Needs Education*, Salamanca, Spain (UNESCO, 1994), which assumes that everyone has the right to be educated in mainstream classrooms that need to be restructured and adapted to meet the individual and group educational needs of all students. The Salamanca Statement also asserts that educational systems that take into account the wide diversity of children characteristics and needs are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all (UNESCO, 1994, para. 2). Because of the high level of global participation (92 governments and 25 international organizations), the Salamanca Framework for Action provides perhaps the best cross-cultural definition of inclusive education.

The fundamental principle of the inclusive school is that all children should learn together, wherever possible, regardless of any difficulties or differences they may have. Inclusive schools must recognize and respond to the diverse needs of their students, accommodating both different styles and rates of learning and ensuring quality education to all through appropriate curricula, organizational arrangements, teaching strategies, resource use and partnerships with their communities. There should be a continuum of support and services to match the continuum of special needs encountered in every school. (UNESCO, 1994, para. 7)

More recently, coinciding with the European Year of People with Disabilities, on the 2nd of December 2003 the *Act on Equal Opportunities, Non-Discrimination and Universal Accessibility for People with Disabilities* [*Ley 51/2003 de Igualdad de Oportunidades, no-Discriminación y Accesibilidad Universal de las Personas con Discapacidad* (LIO), 2003] was passed. This Act complements PL 13/1982 (LISMI, 1982) and PL 1/1990 (LOGSE, 1990). Thanks to all this enactment, the future of the students with disabilities is definitely bright and more secure than before. Now many schools in Spain are looking at ways to enhance inclusive practices and ensure all students

have a meaningful education. For children with disabilities and those experiencing difficulties in learning, this means inclusion in mainstream schools and classrooms alongside their non-disabled peers.

Having presented a background in terms of the historical and social precedents embedded in the Spanish current educational system, the next section presents patterns and trends in inclusive practice. We seek to respond to the question highlighted in the title of this article: Do current trends in special education in Spain reflect legislative mandates towards inclusion? The purpose is to identify specific trends in general and special education over the past 20 years and analyze how the characteristics of regular and special education have evolved over this period of time. These data will offer an excellent opportunity for determining whether the identified characteristics are aligning with state legislation regarding students with disabilities.

### Methodology

Two sources of information were used to obtain the data for this study: (a) state data bases from the Ministry of Education and Science (Madrid), and (b) regional data bases from the Departments of Education of the 17 Autonomous Communities plus Ceuta and Melilla. The Autonomous Community (*Comunidad Autónoma* in Spanish) is the first-level political and territorial division of Spain. Spain is divided into 17 autonomous communities and two autonomous cities (Ceuta and Melilla). These regional governments are responsible for education, health, social services, culture, urban and rural development, etc. The data have been obtained from 1990 to 2007 looking at the reports “*Las cifras de la educación en España*” (The Figures for Education in Spain) published every year by the Ministry of Education and Science [Ministerio de Educación y Ciencia (MEC), 2007] as well as at Eurydice (2007) “*Bases de datos sobre sistemas educativos de Europa*” (Databases on Education Systems in Europe). Because figures tend to vary from community to community and frequently are hindered by several issues (e.g., the accurate identification and assessment of children and youths with special needs, the changing rules and regulations affecting special education, and the time-bound nature of some disabilities), it is recommended that the figures be interpreted cautiously. These data were analyzed to determine if there were specific trends towards the inclusion of students with disabilities based on (a) the number of students identified as having special educational needs receiving special education in inclusive settings, and (b) the distribution of students with SEN by disability placed in integrated versus segregated educational settings.

## Results

### *Estimates of Special Education Students in Inclusive Classrooms in Spain*

Figure 1 presents estimates of the number of students identified as having special educational needs (ages 3 to 16) receiving special education in both the public and the private school sectors of the nation as a whole during the period 1990-1991 to 1999-2000 school years (ten years after the publication of PL 1/1990). As can be seen, just over twenty-seven thousand (27,321) Spanish students were receiving special education in special schools or self-contained classrooms during the 1999-2000 school year compared to the 42,329 special education students served in separate schools/self-contained classrooms ten years before. Therefore, the results reveal the general expectation that segregation of students with disabilities would decrease after the implementation of PL 13/1982. Specifically, the data indicate that the decrease in the number of students enrolled in special education schools since the inception of PL 13/1982 (LISMI, 1982) has been phenomenal (42,329 versus 27,321). This remarkable decrease portrayed in Figure 1 reflects a clear tendency towards the integration of students with disabilities into more inclusive settings.

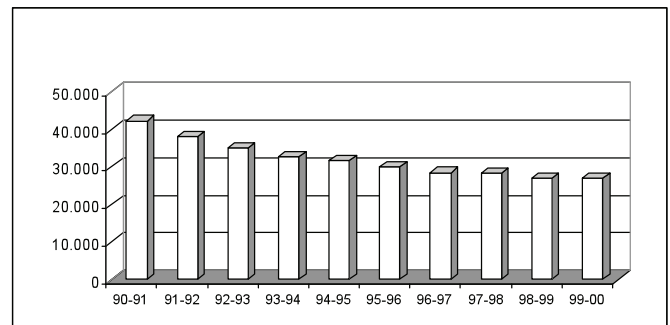


Figure 1. Number of students (ages 3-16) receiving special education in special education schools and in self-contained classrooms: 1990-1991 vs. 1999-2000.

The longitudinal national data displayed in Table 1 between the 2001-2002 and 2005-2006 school years also indicate that the percentage of students with SEN attending separate special schools was almost uniform across this period of time (0.4 vs. 0.5 vs. 0.5 percent of total school population). However, the decrease from 2.1 percent in 2001-2002 to 1.7 percent in 2005-2006 of students with SEN included in regular classrooms while maintaining the same proportion of students with disabilities in special schools suggest that the number of students identified as having special needs during this period dipped.



Table 1

*Percentage of Students (Ages 3-21) Enrolled in Special Education Programs: A Comparison across 2001-02, 2003-04, and 2005-06*

	2001-02	2003-04	2005-06
Total percentage of students with SEN (compared to total school population)	2.5	2.4	2.2
Separate special school	0.4	0.5	0.5
Regular school	2.1	1.9	1.7
School level			
Kindergarten	9.8	12.5	13.6
Elementary	54.1	52.2	49.6
Secondary	31.2	30.4	31.1
High school	0.6	0.5	0.7
Transition programs	4.3	4.4	5.0

Source: Ministry of Education and Science [Ministerio de Educación y Ciencia (MEC), 2008]. *Estadística de las enseñanzas no universitarias. Informes 2001-02 a 2007-08. Madrid: Oficina de Estadística.*

Therefore, in the school year 2005-2006 there were an average of 2.2 percent of students identified as having special needs. Of these 2.2 percent, five students with special educational needs were enrolled in separate schools/self-contained classrooms, while 17 SEN students attended regular classrooms. The greater proportion of mainstreamed students (see Table 1) can be found in elementary school (average percentage across the years of 53.4) followed by secondary school (30.2 percent), and kindergarten (11.3 percent). High school is the level with the lowest rates of inclusion. Public schools serve 73 percent of the students with special needs and have the highest proportion of mainstreamed students (8 of 10 students with SEN). Consequently, the regular classroom is the placement for almost 80 percent of students with special needs (see Table 2).

Table 2

*Percentage of Students with SEN Served by Educational Setting: A Comparison across 2001-02, 2003-04, and 2005-06*

	2001-02	2003-04	2005-06
Special school/ Self-contained class	19	19	21
Regular classroom/ Resource room	81	81	79
Total	100	100	100

Source: Ministry of Education and Science [Ministerio de Educación y Ciencia (MEC), 2008]. *Estadística de las enseñanzas no universitarias. Informes 2001-02 a 2007-08. Madrid: Oficina de Estadística.*

In addition, Table 3 shows that there is a consistent gender imbalance in the identification of students with special needs. An approximate 3:2 ratio of males to females appear across all the Autonomous Communities reflecting a systematic difference in the extent to which males and females are perceived to have special educational needs.

Table 3

*Percentage of Students with SEN of Total School Population by Gender and Autonomous Community (School year 2005-06)*

	Total (%)	Boys (%)	Girls (%)
Total Andalucía	2.3	2.8	1.8
Aragón	2.1	2.5	1.7
Asturias	2.3	2.8	1.8
Baleares	3.5	4.2	2.7
Canarias	1.2	1.4	1.0
Cantabria	4.1	5.0	3.2
Castilla y León	2.2	2.4	1.9
Castilla-La Mancha	3.0	3.5	2.4
Cataluña	1.6	2.0	1.2
Valencia	2.3	2.9	1.7
Extremadura	3.1	3.8	2.4
Galicia	1.6	1.9	1.3
Madrid	2.1	2.6	1.7
Murcia	3.5	4.2	2.7
Navarra	3.0	3.9	2.1
País Vasco	1.9	2.4	1.4
Rioja (La)	2.3	2.7	1.8
Ceuta	4.0	4.6	3.3
Melilla	3.2	3.7	2.6
TOTAL	2.2	2.7	1.7

Source: Ministry of Education and Science [Ministerio de Educación y Ciencia (MEC), 2008]. *Estadística de las enseñanzas no universitarias. Informes 2001-02 a 2007-08. Madrid: Oficina de Estadística.*

#### *Distribution of SEN students by disability and educational placement*

Learning disabilities as they are defined in the United States and other countries do not exist as a legal category in the area of special education in Spain. Diagnostic categories are conceptualized in a much broader sense, which ranges from “permanent” special educational needs due to deaf/blindness, motor, or intellectual/cognitive impairments to the so called “transitory” or less severe special educational needs. However, in order to estimate prevalence, the government uses six categories of disability (hearing impairments, visual impairments, motor impairments, intellectual and cognitive impairments, autism and other personality disorders, and multiple disabilities). The

number of students in each of the six most frequent disability categories recognized by the Spanish government is recorded in Table 4. Special education needs derived from intellectual and other cognitive disabilities account for more than half of all students with SEN (average of 61 percent), while students with visual impairments represent the smallest category of exceptionality (2.3 percent in average). While the growth of integrated special education over the past two decades has been noteworthy, some areas of disability have grown faster than others. For instance, the population of students identified as autistic and/or with personality disorders (emotional and/or behavioural) has grown dramatically (the percentage of this category rose from 12.5 percent in 2001-2002 to 18.3 percent in 2005-2006). On the contrary, others (e.g., multiple disabilities) have decreased across this period of time. Table 4 depicts the distribution for other selected categories of exceptionality at state level.

Table 4

*Percentage of Students with SEN by Category of Disability: A comparison across 2001-02, 2003-04, and 2005-06*

Disability	2001-02	2003-04	2005-06
Hearing impairments	4.7	6.1	5.6
Visual impairments	2.8	2.0	2.0
Motor and other physical impairments	7.2	7.6	8.3
Intellectual and other cognitive impairments	63.8	61.0	58.1
Autism and other personality disorders	12.5	13.6	18.3
Multiple disabilities	9.0	9.7	7.7
TOTAL	100	100	100

Source: Ministry of Education and Science [Ministerio de Educación y Ciencia (MEC), 2008]. *Estadística de las enseñanzas no universitarias. Informe 2001-02 a 2007-08. Madrid: Oficina de Estadística.*

Table 5

*Percentage of Students with SEN by Disability and Educational Setting: A Comparison across 2001-02, 2003-04, and 2005-06*

Disability	2001-02		2003-04		2005-06	
	RC1	SS2	RC1	SS2	RC1	SS2
Hearing impairments	86.4	13.6	90.1	9.9	90.7	9.3
Visual impairments	92.1	7.9	88.8	11.2	93.5	6.5
Motor and other physical impairments	85.0	15.0	84.1	15.9	85.4	14.6
Intellectual and other cognitive impairments	85.4	14.6	83.7	16.3	82.4	17.6
Autism and other personality disorders	71.8	28.2	72.3	27.7	77.6	22.4
Multiple disabilities	47.8	52.2	51.8	48.2	43.3	56.7
TOTAL	78.1	21.9	78.5	21.5	78.8	21.2

<sup>1</sup>RC = Regular classroom/Resource room

<sup>2</sup>SS = Special School/Self-Contained Classroom

Source: Ministry of Education and Science [Ministerio de Educación y Ciencia (MEC), 2008]. *Estadística de las enseñanzas no universitarias. Informes 2001-02 a 2007-08. Madrid: Oficina de Estadística.*

Table 5 compares percentages of students with SEN who received their education in integrated versus segregated school settings from the 2001-2002 school year through the 2005-2006 school year by disability. These data reveal much information. First, most SEN students receive their education primarily in general education settings, with some support. Almost 80 percent of students with SEN (78.5 percent in average) receive their education in either the general education classroom or in a combination of general education and resource room classes with non-disabled peers. Second, placement rates are changing with resource rooms becoming a less common placement option (e.g., for personality disorders), while the use of self-contained classes for students with some disabilities is increasing (e.g., for multiple disabilities and severe intellectual retardation).

When the distribution of students with SEN in inclusive classrooms is analyzed at a community level more precise information can be obtained (see Table 6). The rates at which Autonomous Communities use each type of placement for students with disabilities vary tremendously. For example, *Catalonia's* rate of inclusive placements (55.2 percent) is almost half that of the *Balearic Island's* rate (89.7 percent). Placement rates also vary wildly by disability. For instance, in the *Valencian Community* and in *La Rioja* 100 percent of all students with visual, hearing and motor impairments receive their education in general education classrooms, while in *Aragón* only 65.2 percent of hearing impaired students and 70.3 percent of students with motor problems in *Catalonia* do. The results shown in Tables 5 and 6 indicate that the special education groups more easily included are the students with hearing and visual impairments and the most difficult to be included the students with multiple disabilities and personality disorders.

Table 6

*Percentage of Students with SEN in Inclusive Classrooms by Disability and Autonomous Community (School year 2005-06)*

	Total (%)	Hearing Impairments	Visual Impairments	Motor Impairments	I & C Impair.	Autism and OD	Multiple Disabilities
Andalucía	83.1	81.1	85.4	71.1	85.9	81.7	NA
Aragón	77.2	65.2	96.9	99.1	88.4	39.0	35.6
Asturias	80.3	100.0	96.7	97.2	84.0	75.4	38.1
Baleares	89.7	94.7	100.0	100.0	95.7	71.7	56.7
Canarias	63.8	94.4	82.9	86.8	67.5	59.3	18.9
Cantabria	89.3	100.0	100.0	96.7	94.0	81.9	68.6
Castilla y León	82.6	96.8	99.1	99.4	88.9	76.4	36.6
Castilla-La Mancha	86.8	97.9	100.0	94.5	92.1	79.3	46.8
Cataluña	55.2	86.2	92.7	70.3	54.2	49.3	NA
Valencia	79.4	100.0	100.0	100.0	82.4	83.7	0.5
Extremadura	87.1	99.3	98.3	100.0	91.5	65.7	60.4
Galicia	78.0	80.9	92.0	100.0	70.5	93.4	60.3
Madrid	77.2	87.8	98.3	97.0	81.2	74.1	40.8
Murcia	88.8	99.3	100.0	99.3	93.6	57.7	57.2
Navarra	84.6	100.0	100.0	95.7	81.9	98.4	55.1
País Vasco	80.9	91.1	96.9	80.6	78.1	89.8	50.7
Rioja (La)	84.2	100.0	100.0	100.0	93.2	45.3	44.0
Ceuta	82.9	100.0	100.0	100.0	89.6	15.8	17.9
Melilla	89.6	100.0	100.0	100.0	93.4	66.7	46.4
TOTAL	78.9	90.7	93.5	85.4	82.4	77.6	43.3

<sup>1</sup>RC = Regular classroom/Resource room<sup>2</sup>SS = Special School/Self-Contained ClassroomSource: Ministry of Education and Science [Ministerio de Educación y Ciencia (MEC), 2008]. *Estadística de las enseñanzas no universitarias. Informes 2001-02 a 2007-08. Madrid: Oficina de Estadística.*

### Discussion

Inclusion has emerged as one of the most controversial and complex subjects in the field of special education around the world. In Spain, full inclusion has been understood as the belief that all children with special education needs should be taught exclusively (with appropriate supports) in general education classrooms at neighbourhood schools within the same school and age/grade appropriate classrooms they would attend if they were not disabled. But successful implementation of inclusion policies requires new thinking, and renovated practices in schools that not all teachers develop.

Special education in Spain as reflected the data here presented has been moving forward from segregation to integration. The trends found in the last two decades indicate changes in state mandates, changes in attitudes in schools, and changes in society in general. First, the number of students enrolled in special education schools have dropped considerably after the publication of PL 13/1982 and especially during the 1990s. In addition, the percentages of special education teachers in Spain's regular schools have increased while the assignment

of teachers to resource rooms has decreased (Cardona, 2006; García-Pastor, 1998; Moriña-Díez, 2002). Therefore, the delivery of services to students with special needs may be more inclusive than before as higher percentages of students receive services in regular classrooms than in any other situation, and collaborative teaching is increasingly being viewed as highly recommended. Nevertheless, in practice teachers are not always responding favourably to the need to collaborate with other school staff which may indicate the limited training they have received in collaboration as well as the additional time needed for effective collaboration (Rao, Soffer, Cardona, & De la Peña, 2008).

Although the service-delivery options for students with special educational needs reflect the legislative changes toward more inclusive environments, the data clearly show that schools are still using separate settings for some groups of special education students. Students with autism and other personality disorders, as well as students with multiple disabilities are the two groups of students with SEN with lower rates of inclusion in regular classroom placements. These data are inconsistent with the aim of the law and demand greater attention.

In the last two decades, special education in Spain (a) decreased and maintained low levels of segregation and moved students with disabilities to more inclusive settings, (b) transformed some special schools into resources centers, (c) focused increasingly on individual instruction rather than disabilities, and (d) increased the need to engage in continuous collaboration with general education teachers, nevertheless, many of the educators are not satisfied with the current state of inclusion. They believe that since the passage of PL 13/1982 and PL 1/1990, special education in this country has witnessed significant change but not significant progress (Parrilla, 2007). According to Kavale (2007), the consequence of these beliefs are generally found in attitudes that oscillate between optimism and pessimism about the prospects for inclusive education.

From my view in Spain there is optimism about the law's success in providing access of students with disabilities to regular schools, but pessimism about whether or not the appropriate education provision is achieving the desired outcomes. Such pessimism, as Kavale (2007) pointed out, is not new but needs to be addressed. Clearly more efforts need to be made to achieve gains in real participation, effectiveness, and quality of services. As Gargiulo (2003) stated, "when correctly instituted full inclusion is characterized by its virtual invisibility. Students with disabilities are not segregated but dispersed into classrooms they would normally attend if they were not disabled" (Gargiulo, 69-70). In Spain, this virtual invisibility only will be possible when the barriers and challenges experienced by the Spanish educational system are eliminated. Currently these barriers lay on (Echeita, 2006; López-Melero, 2004):

1. Secondary level education: all the Autonomous Communities report serious problems at this level as compared to primary schooling. Autonomous Communities attribute these problems to insufficient teacher training, teacher attitudes, an increasing achievement gap between students with SEN and their peers, increased academic subject specialization and different school organization.
2. Role of parents: most Autonomous Communities reported positive attitudes toward inclusive education on the part of parents, and that parental pressure towards inclusive education is increasing. However, those families that have students with severe disabilities sometimes prefer segregated settings.
3. Lack of training and personal resources (e.g., support teachers): these are major barriers of inclusive education. Autonomous Communities are undergoing major curriculum reforms in the context of the process of the European Convergence of Higher Education Reform. These changes will have direct implications in teacher education training.
4. Legislation: progress has been achieved, but problems still remain (e.g., more transition programs and improvement of quality and level of service for all is a must).

In summary, although there is a definitive trend toward increasing inclusive practices in Spain, considerable variation exists. All Autonomous Communities face several challenges. The most significant of these are meeting the needs of students with SEN in secondary schools and post-secondary education, improving teacher training, and increasing resources and the quality of services. By this time, equality of access has been reached, but real participation and documentation of effectiveness in terms of outcomes are still lacking.

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# What We Know about Autism in Africa: A Brief Research Synthesis

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## Abstract

*Aside from Lotter's groundbreaking studies in six African countries, few studies about autism in Africa have been published. The samples in the published studies do not appear to be representative of children in the respective countries. Hence, it is difficult to determine the prevalence rate of the disorder in the countries. However, the studies have shown that children with autism in both the West and Africa generally exhibit almost similar behaviors. This paper examines available studies and discusses how much is known about autism in Africa. It is anticipated that such an effort will generate discussion and more research on the subject leading to better understanding of the disorder and thereby promoting better treatment outcomes among this population.*

### Autism in Africa

It has been over two decades since Sanua (1984) posed the question whether infantile autism was a universal phenomenon. After citing a few studies, particularly an earlier one by Lotter (1978), documenting the prevalence of autism in African countries Sanua concluded that autism existed in Africa. Since then a few more studies have been published shedding more light on this subject and today one can say with certainty that autism does exist in Africa. But what else is known about the epidemiology of this developmental disorder in the continent? Are there any differences between the manifestations of autism in Africa and autism in the Western countries? This paper attempts to examine these issues via an examination of extant research on this subject.

### Definition of Autism

Autism is a developmental disorder which usually manifests around age 3 and is characterized by significant deficits in verbal and nonverbal communication as well as social interaction skills (Turnbull, Turnbull, & Wehmeyer, 2007). The term autism spectrum disorders (ASD) encompasses disorders ranging from one severe end where we have non-communicative children to the other end where we have individuals who are highly functioning in intellectual and language skills (see Table 1 for a list of the ASD). Although there is a flurry of research on autism, the etiology is still enigmatic. But there is consensus among researchers that genetics plays a significant role (Britsol et al., 1996).

### Autism in Africa

An examination of extant research shows that little is known about autism in Africa. There is no doubt that autism exists on the continent with a few studies having documented its existence (Akande, 1999; Lotter, 1978; Mankoski et al.,

2006; Moodely, 1992). However, the prevalence rate for autism here is not known. It appears there are no studies that have been done to try and establish the prevalence rate of autism in this continent. The few studies that have examined the existence of autism here were not comprehensive enough. They were done on randomly assigned samples of children which could not be used to estimate a reliable prevalence rate. Lotter, for example, examined the presence of autism among children with mental retardation in nine major cities in six African countries. Similarly, Khan and Hombarume (1996) also examined and documented the existence of autistic behavior among children with mental retardation in Zimbabwe. The samples of children included in these studies do not appear to be representative of children in the respective countries, thus, limiting the extent to which one can extrapolate the prevalence rate of the disorder in those countries.

### Manifestation and Characteristics of Autism in Africa

The exact cause of autism is not yet known and researchers around the globe continue to explore the subject with gusto although most now agree that autism is a genetic disorder. Some researchers have found a link between autism and infectious diseases (Ghaziuddin et al., 1992, 2002; Martin, 1995). In Africa Mankoski and colleagues (2006) found a link between autism and malaria. In a study of 14 children who met the criteria for autism, 21% (n = 3) of them had the onset following a bout of malaria leading Mankoski and colleagues to hypothesize "... that severe malaria, when contracted in the first few years of life, can cause autism" (p. 1045). More controlled studies are needed to test this hypothesis because if it were true one would expect to find more cases of autism in Africa than in the West i.e. all things being equal (Mankoski et al., 2006).

Recent estimates in the USA suggest that 1 in 150 children have autism with boys outnumbering girls by a ratio of 4 to 1 (Heward, 2009). Based on a few studies that were found

reporting incidences of autism in different African countries, the average male-to-female ratio calculated in these studies was 3.8 to 1 which is about the same as that reported for Western countries (see Table 1). However, the prevalence rate is difficult to estimate given the limitations of current research on the topic.

Table 1

*Males-to-Females Ratio of Autism in Africa*

Author, (Year)	# of Children with Autism	# of Boys	# of Girls	Ratio (B:G)
Lotter, (1978)	9	6	3	2:1
Mankoski, (2006)	14	10	4	3:1
Khan & Hombarume, (1996)	18	15	3	5:1
Weru, (2005)	40	35	5	7:1
Dhadphale et al., (1982)	3	2	1	2:1

Note: B=Boys, G=Girls

Another interesting observation from the literature is the overrepresentation of upper class families among children with autism in Africa (see Table 2) (Dhadphale et al., 1982; Lotter, 1978; Mankoski et al., 2006; Sanua, 1984). However, it is difficult to make inferences based on this observation because a number of factors may have contributed to this outcome. First, most of the studies that report the social status of the parents were done in major cities in Africa where there appears to be a concentration of upper class families (Lotter, 1978; Mankoski, 2006; Dadphale, 1982). It is also possible that lower class families could not afford to seek services for their children since those who participated in the studies were identified through service institutions such as hospitals or schools. Hence, although it may be true that autism in Africa is mainly associated with upper social class families, more research is needed to confirm this position.

Table 2

*Social Status of Families of Children with Autism Africa*

Author, (Year)	# of Children with Autism	Social Status
Lotter, (1978)	9	78% elite
Mankoski, (2006)	14	Well educated parents with responsible jobs
Khan & Hombarume (1996)	18	Not specified
Weru, (2005)	40	Not specified
Dhadphale et al., (1982)	3	Upper class, educated parents

Children with autism generally exhibit behaviors that fall under the following behavioral taxonomy: (a) impairments in verbal and non verbal communication, (b) impairments in social interaction, (c) limited repertoire of activities and interests and (d) stereotypy or ritualistic behavior. To what extent do these behaviors occur among children identified with autism in Africa? So far all the four categories of autistic behavior have been documented in Africa (Dhadphale et al., 1982; Khan & Hombarume, 1996; Mankoski et al., 2006; Moodley, 1992; Moodley, 1993). However, Lotter (1978) found that certain stereotypical behaviors such as hand flapping, self aggression, and rocking, which are common in the West were uncommon among the African sample. More recently, a study by Mankoski and colleagues (2006) seemed to confirm that certain autistic behaviors known to be common in the West may not be as common in Africa. Rocking, for example, was not common among their sample of children. This suggests that there may be differences in the manifestations of autistic behavior between Western and African populations. However, given the paucity of comprehensive studies on autism in Africa, it may be too early to reach that conclusion.

Furthermore, the age of onset for autism in the continent is yet to be determined. Based on the Western criteria, autism is generally believed to manifest at age 3 (Turnbull, Turnbull, & Wehmeyer, 2007). Unfortunately, no study seems to provide reliable data pertaining to what age Autism may start manifesting among African children. Mankoski and colleagues' (2006) study, for example, was retrospective in nature with researchers relying on retrospective information provided by parents and thus it may not be a reliable way to establish the age of onset.

**Conclusion**

Although ASD have received a lot of scholarly attention in recent years, the scarcity of such research pertaining to Africa is striking. Not surprisingly, little is known about ASD in the continent. However, Lotter's study (1978) has provided ample evidence that ASD exists in Africa, although the prevalence rate is still unknown. Current research indicates that the typical autistic behaviors (i.e. impairments in verbal and non verbal communication, impairments in social interaction, limited repertoire of activities and interests, and stereotypy or ritualistic behavior) documented in Western societies are also found among children with autism in Africa. Nevertheless, it appears that certain behaviors that have been reported to be very common in the West may not be as common in Africa. More controlled studies are needed to establish the prevalence rate of ASD in the continent. Also, more research is needed to examine factors such as the age of onset and the epidemiology of the spectrum across the continent. It is anticipated that such efforts will enhance better understanding of the disorder and promote better treatment outcomes among the African population.

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# Hear Our Voices: Mexican Parents and Professionals Speak About Children with Disabilities

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## Abstract

*In January 2004 faculty from the University of Scranton traveled to Mexico to establish relationships with universities, clinic personnel, hospital personnel, school personnel, and parents in order to increase their understanding of the role disability plays in that country. This interdisciplinary group of professionals in special education, occupational therapy, physical therapy and hospital administration, visited 17 university, government, and community-based agencies to gather data regarding the provision of healthcare, education and rehabilitation services to children with disabilities in Mexico. This article focuses on the role the family plays when they have a child with disabilities. Professionals and parents were interviewed and as in the United States the dichotomy between professional and parent are evident.*

Why should people from the United States study disability in Mexico? As of July 1, 2003, the estimated Hispanic population in the United States was 39.9 million people making people of Hispanic origin the nation's largest racial or ethnic minority (Hispanic Heritage Month, 2003). This statistic reportedly does not include the 3.9 million residents of Puerto Rico. As of July 1, 2050, the estimated U.S. Hispanic population is expected to be 102.6 million which would comprise 24% of the nation's total population (Hispanic Heritage Month, 2003). Currently, 67% of the total Hispanic population is of Mexican background, 14% is of Central and South American backgrounds, 9% is Puerto Rican, 4% Cuban and 7% is of other Hispanic origins (Hispanic Heritage Month, 2003). It is important for special education professionals in the U.S. to understand the Mexican culture and the families' culturally-based responses to a child with disabilities. Different cultures view disability differently. Viewing the family through the lens of Anglo-American culture may lead to misunderstandings and conflict. Understanding the families' cultural and belief foundation will allow special educators in the U.S. to assist and serve recent Mexican immigrants more effectively.

There is limited research available on families from Latin America who have a child with disabilities. The majority of the research is based on families who have immigrated to the United States and not on families who reside in Mexico. When we examine the literature in an effort to understand families from a specific cultural background it is imperative that we only use the literature as a general guide. The need to look at each family individually is especially true when looking at families from a Hispanic background. The group of people that we designate as Hispanic is an extremely diverse population whose commonality comes from the perception that the Spanish language unifies them. Even this is not always true because some Hispanic people are also indigenous people who may speak their own unique language.

Zuniga (2004) in her chapter from *Developing Cross-Cultural Competence* (Lynch & Hanson, 2004) describes the important characteristics professionals working with Hispanic immigrant families who have children with disabilities should understand. Zuniga (2004) states that the beliefs professionals hold about Hispanic families may be stereotypical. It is important that professionals view their beliefs with skepticism until they know the family individually.

Zuniga (2004) reports one of the stereotypical beliefs about Hispanic people is that the Hispanic family is male dominated with women fulfilling a lesser role. The stereotype depicts men as the breadwinners and women as the caretakers of the children and the home. Zuniga (2004) states that the characteristic of "machismo" is changing in Mexican-American families as more women are taking jobs outside of the family. She states this has enhanced the wife's position and allowed her to become a decision maker and equal partner with her spouse.

Educational professionals may also believe that Hispanic families do not value education. This belief comes from school districts' experiences in which Mexican immigrant parents kept their older children out of school to baby sit younger children. Zuniga (2004) reports this misconception is due to Mexican immigrants not understanding the educational system of the United States. When child care is provided and when educational system rules and regulations are explained, the Mexican-American immigrants become participants in their children's education (Zuniga, 2004). Mexican-American immigrants may also be hesitant to interact with educational professionals and become involved in the school system if the family has entered the country illegally. The family may perceive any professional as a threat to their continued residence in the United States.

In Hispanic cultures the purpose of marriage is to have children (Zuniga, 2004). The parent-child relationship is more important than the marriage relationship. Parents may be very indulgent and not push their children to achieve developmental milestones that Anglo culture deems important (Seligman &



Darling, 1999; Zuniga, 2004;). For example, it is not unusual for children of Hispanic culture to allow their children to use pacifiers longer than what is considered normal for Anglo culture. This may cause problems for Anglo early interventionists who use developmental schedules based on Anglo developmental norms. Garcia, Mendez Perez, and Ortiz (2000) conducted a study looking at Mexican-American mothers' beliefs about their young children with language delays. Garcia et al. (2000) reported that the mothers did not believe their children had language delays and felt they would eventually start talking. Cultural conflict occurs when the provider of services and the parents of the children being served do not agree on whether or not there is a disability.

A value or belief system that reportedly occurs in Mexican-American families is the expectation that children will take roles and responsibilities within the family (Zuniga, 2004). This belief system may be more class related than culturally related as families from lower socio-economic status may need the children to contribute to the survival of the family. For a family depending on their children to contribute to the economic survival of the family, having a child with disabilities may be crushing if this contribution is not possible. Another value or belief held by some Mexican immigrants that may be problematic for professionals is the use of natural healers (Zuniga, 2004). They may take their child with disabilities to a natural healer instead of a medical professional. This practice stems from many Mexican families not having the financial resources available to pay for medical care. The natural healer is affordable and in many parts of rural Mexico is more accessible to people with limited financial means and little education. Medical care in impoverished parts of Mexico is inconsistent. Medical doctors spend only a small time in rural clinics in order to fulfill their public work obligations and as a result do not establish long-term relationships with families. In contrast, the natural healer is accessible, affordable, and a consistent part of the local culture. In addition, medical doctors may not be well trained in disabilities (Centro de Atención Infantil Piña Palmera, 2003). Anglo families in the United States have also complained that pediatricians in the United States have not received a great deal of training treating children with disabilities. A medical doctor is trained to deal with curing disease, not dealing with problems that are ongoing (Seligman & Darling, 1999). Many Mexican-American immigrants have difficulties relating to the educational professionals and rehabilitation specialists due to cultural beliefs and values that conflict with United States professional practices.

It is the expectation of many special education professionals in the United States that the family will be a willing partner in the rehabilitation and education of children with disabilities. The Individuals with Disabilities Education Act (IDEA) as well as the most recent reauthorization of IDEA promotes the participation of parents in the educational process of their children. IDEA promotes the value that parents are equal members of the team that refers, assesses, and develops programming for young children with disabilities. Cultural

differences must be understood and addressed if the goals of IDEA are to be achieved in the United States in serving the immigrant Hispanic population.

In January 2004 faculty from the University of Scranton traveled to Mexico to establish relationships with universities, clinic personnel, hospital personnel, school personnel, and parents in order to increase their understanding of the role disability plays in that country. This interdisciplinary group of professionals in special education, occupational therapy, physical therapy and hospital administration, visited 17 university, government, and community-based agencies to gather data regarding the provision of healthcare, education and rehabilitation services to children with disabilities in Mexico. This author focused on the role the family plays when they have a child with disabilities.

### **Monterrey, Nuevo León, Mexico**

The social-economic and educational level of the family in Mexico ultimately determines the role parents of children with disabilities take in being a member of the team. This involvement was evident in Monterrey, which is a very modern, industrialized city. Here we visited Hospital San José, a private hospital, focusing on acute care. It was very modern and included family rooms. The room was actually a suite of two rooms, one in which the client stayed and the other where the family stayed. These rooms were very luxurious and certainly showed that the importance of the family as a member of the team was recognized.

Another site we visited was the Centro de Rehabilitación Educación Especial (CREE), a government sponsored facility providing services free of charge to the community's adult and pediatric populations. The CREE demonstrated a variety of services being delivered to clients and their families. As we toured the facility we observed professionals talking with adults with disabilities and parents of children with disabilities. We also observed professionals talking to couples in which one of the partners had disabilities. As a group we met with different professionals including an occupational therapist, a physical therapist, a social worker, one director of federal promotion program who was a former client, and an orthopedic surgeon. They explained their facility and their approach to rehabilitation.

The author inquired about how the health professionals worked with the families. They stated that when they work with little children it is important to work with the family and reported that some families "overprotect" their children with disabilities. Overprotection was a continuous theme we heard from professionals in Mexico and reiterated by some of our own colleagues in the United States about parents of children with disabilities in Mexico. The professionals spoke about trying to assist the parents of young children to overcome their fear of their child's disability and to understand that people with disabilities can hold jobs and live independent lives. The professionals at CREE stated that they try to refocus the family

dependency toward assisting the person with disabilities to explore their options and fully live life. The professionals felt family interdependence is not always a bad thing and may keep a family from abandoning the child.

Another area discussed was the tendency of mothers to focus on the child with disabilities and not the other children. A similar tendency permeates family disability literature and certainly is prevalent in the United States. The early literature on families and disability reported that mothers neglected their spouse and other children in order to give their attention to the child with disabilities. Early counseling literature about parenting a child with disabilities focused on the concern that mothers would neglect their other children and spouse.

The Mexican professionals also stated that the family needs to be part of the team. The person with disabilities may be resentful of the team feeling the mother especially should give them extra attention. The professionals also stated there is a high level of divorce with either the father or the mother leaving and grandparents having to raise the child. When the author counseled families in the 1980s she read a great deal of literature which alluded to high divorce rates because mothers were overly involved in the child with disabilities. Although the author counseled families that broke apart, the break up was generally because the family had difficulties before the child with disabilities was born.

The Mexican professionals reported their culture is not a culture that seeks out information. Parents are not inclined to look for information on their own. They depend on professionals to supply the information the professionals deem important. When looking at the history of the parent movement in the United States, Turnbull, Turnbull, Erwin, and Soodak (2006) refer to this type of professional/parent relationship as parents as recipients of professional decisions. That is, professionals expect parents to comply passively and gratefully with the information and suggestions that are given to them. Many rehabilitation and special education professionals in the United States still ascribe to this type of professional/parent relationship.

### **Guadalajara, Jalisco, Mexico**

After Monterrey the team traveled to Guadalajara and visited The Centro de Atención Múltiple, The Instituto Educativo Para Personas con Parálisis Cerebral, The Centro Integral de Rehabilitación Infantil A.C., and The Instituto Loma Bonita.

Centro de Atención Múltiple (CAM) has 220 students and 43 staff members with an interdisciplinary team of psychologists, teachers, parent social workers and physical therapists. At the CAM the psychologist works with the family. According to the psychologist the needs of both the family and the child are examined. When the psychologists work with families they see several problems occurring. First, they see that families underestimate the skills of the child. Families have a fear of letting go and they want to protect the child. The professionals feel the parents take advantage of the situation and come to believe in the "sainthood" syndrome. The second problem they

see is the person with disabilities may feel there is no need to work. The person with disabilities spends the days watching television and feels no need for independence. The psychologist at the CAM also said that some parents are completely accepting of the child's disability. They are good collaborators, persistent in looking at the child's eventual independence. The CAM holds parent groups in which one of the leading themes is to help parents accept the disability. Parents are taught how to maintain authority and discipline at home and the importance of not overprotecting the child with disabilities. The support groups also include topics such as couples' relationships, sibling relationships, future life planning, and self-esteem of parents. The school for parents is very successful, but only about 5% of the attendees are fathers (personal communication, January, 2003). This may happen because in the Hispanic culture the role of mother and father are historically strongly delineated, with the mother being the main caretaker and the father being the provider and the authority figure (Turnbull et al., 2006). Although this appears to be changing in Mexico there are still areas in which the roles are strongly defined.

Instituto Loma Bonita is a private special education facility started in 1994 consisting of two different schools. One school is segregated and the other school is considered inclusive. The inclusive school consisted of 60% children with disabilities and 40% children who did not have disabilities. Many of the children without disabilities were siblings of the children with disabilities. It was at this site that the author interviewed a group of four parents whose children attended the school. The interview took place in the principal's office with the principal in attendance but not participating. The spouse of one of my colleagues interpreted for me.

I interviewed three mothers and one father. At a later date I interviewed another father. The stories the five parents told are very similar to stories parents of children with disabilities in the United States tell. The four children have a range of disabilities including, autism, Down syndrome, and mental retardation with a seizure disorder, and possibly cerebral palsy. The fifth child was described as having a "brain disorder." I asked the parents to describe the composition of their families. Jose (fictitious name) had Down syndrome, has two siblings and was four years old. Maria (fictitious name) had what appeared to be a stroke when she was four months old, had five siblings and was 23 years old. Sylvia (fictitious name) has one sibling and the parent was told that the myelin in her brain did not grow. Sophia (fictitious name) has autism and is an only child.

The parents were asked to describe their child with disabilities. The mother of Jose reported, "He is a delightful child who likes to dance and is very charming." The father of Maria reported, "My daughter is very sensitive. She had brain damage when she was very little and at 23 is still a child. She cries when upset." When he appears worried she asks him about being worried. He reported, "She is a great cook, but is lonely." He stated, "She is like a child, but is also like a little adult." Sylvia's mother talked about her child also being sensitive and intelligent. She reported, "She is a visual learner and can look

at people's faces and know whether the person is happy or sad." Sophie's mother stated "She is afraid of loud noises. She interacts with children and before she came to school she only interacted with adults. She has problems communicating. She can tell everyone what she needs by using gestures but cannot speak." All four parents displayed love and caring for their children with disabilities. At times they appeared sad about the disability but they expressed a fondness for their children.

The parents were asked, "How were you told about your child's disability?" Many parents in the United States report the lack of compassion from professionals when the professionals tell parents about the initial diagnosis. I have heard several accounts from parents in which the pediatric neurologist from a large teaching hospital stormed into the consulting room with a group of young residents following in his path, announced the disability of the child and then left with his entourage in tow leaving parents gasping for air. Jose's mother reported that she knew at birth that her child had Down syndrome. The doctor advised her that it was Down syndrome. She reported that the characteristics were very obvious. Maria's father reported that two veins burst in her brain forty days after her birth and she had convulsions. The doctor reported that she was not going to survive and that she would be a "vegetable." The doctor also reported that she would not be able to walk. The father reported that she does walk and that he believes she is very intelligent. He related how she was the happiest when she was in school. "She doesn't like vacations because she misses her teachers. School has changed her life. When she went to school for five years in Mexico City she was very unhappy."

Sylvia's mother noticed that at four months of age the baby was cross-eyed. She reported that the child's motor skills were delayed and at two years of age she couldn't speak. They took her to a neurologist who performed many tests. The neurologist reported there was a lack of myelin in the brain which has affected her speech. The mother reported that the child studies hard but cannot control her eyes. The doctor told them to stimulate her and wait for the myelin to grow. Her mother reported that there has been growth of the myelin but that the growth is not as much as they had hoped for. Sylvia still needs a special school. Her mother has taken her to equine therapy and special swimming therapy and the combination has shown progress. They also have a private physical and speech therapist that comes to their home. Sylvia can communicate with picture symbols and can use some manual signs.

The parents were asked "Why do you think this child was born with a disability?" I was particularly interested in the answers to this question because some of the literature reports Mexican families are fatalistic and superstitious about the reason a child is born with a disability. Zuniga (2004) reports that many Mexican-heritage people believe the evil eye caused the disability or someone put a hex on the child out of jealousy and caused the disability. These families did not report ascribing to this belief system. Jose's mother reported it was nature's way. Maria's father felt there was a misuse of forceps and she

was dropped when she was delivered. He feels that these two incidents combined caused the problem that appeared when she was four months old. Sylvia's mother said that the doctors told them that the embryo did not mature enough to get the myelin. They were told that the myelin would heal over time but this has not occurred. Sophie's mother was not sure what caused the autism, as they were never told. One doctor told her it was her fault that her child had autism so she stopped going to the doctor. This was very hard for the mother to report and her eyes filled with tears. Turnbull et al. (2006) identify this parent-professional relationship as the parents-as-cause perspective and report that nowhere has professional blaming behavior been more evident than in the field of autism. Mothers were labeled as frigid, uncaring, perfectionist, emotionally impoverished, and depressed (Turnbull et al., 2006).

The parents were asked "What are your child's strengths and needs?" Jose's mother stated that her child is a lovable child. She stated that his strengths include being socially attentive while his difficulties include speech due to his Down syndrome. Maria's father states that his child's limitations are motor skills. "She performs everything with the left side and does everything slowly." He reported that she can answer the phone and she can dial the phone to call her brothers and sisters. She is not afraid when she is alone because she doesn't want to go to her brother's house. She likes the characters in soap operas. The father feels that his mother-in-law is overprotective. His mother-in-law thinks Maria is sick, which is a common folk belief that some Mexican people have about people with disabilities. When a child with disabilities is born a healer may be consulted for an alternative treatment plan (Zuniga, 2004).

Maria's father reported that his late wife was also overprotective. He feels that since his wife has died his daughter has made a great deal of progress. The first year after the passing of his wife was hard on his daughter. The year after she died his daughter came to Instituto Loma Bonita and has made significant improvements. Sylvia's mother stated that her child needs a routine. When the routine is changed Sylvia gets upset. Sylvia needs to have the change explained to her so that she doesn't get upset. When they have company Sylvia will tell them good night and that it is time for them to leave. Sophie's mother states her child does not like crowds. Her family cannot take the child to the movies because she feels claustrophobic.

The parents were asked "Has your extended family accepted your child with disabilities?" Sophie's mother has more problems with other people accepting her child. She is asked if she has sinned and that has caused the problem of her child. Jose's mother stated this is not a culture that accepts people with disabilities. The culture has visions of beautiful people, not people with disabilities. Attitudes towards disabilities in the United States are very similar to Mexico's attitude. One only has to look at our heroes to know that the United States reveres its "beautiful people." She did say that the family accepts her child. Maria's father states that all members of his family love her. Other people do not understand what her problem is. He

stated that most people avoid the family and friends when his daughter is with them. Sylvia's mother stated that her family has always loved her and accepted her child. She looks very normal. It is interesting that children often ask why she doesn't speak and walk.

The parents were asked "What are your dreams for your child?" The mother of Jose stated that she doesn't dream. She sees continuous progress as long as he goes to the best schools. There are no special schools for him when he is older. She stated she is not really sure what she wants since he is only four years old. She would like him to be independent. She hopes when the time comes he will live in an independent learning center. She stated that the future will hold what it holds. She hopes he will be able to work and be in some sort of profession. She will support him in whatever he does.

Maria's father stated he hopes she will be as independent as possible. He is very concerned because the Ministry of Education is looking at her because she is too old for school. If she has no activities there are no options for her. He wants her to get a skill.

Sylvia's mother says that she has an uncertain future. If she can't read or write or develop employable skills she will have to stay home. She wants independence for her daughter. Sylvia's mother would like to have someone provide for her daughter when the mother is no longer able to take care of her. She is afraid no member of her family will take her when they are no longer living.

Sophia's mother hopes she will be independent. She is not sure what she can expect for Sophia when she grows up. She hopes she will be able to take care of herself, feed herself, and bathe herself, and then she wonders if she is being realistic.

At a later date I interviewed the father of two children: a 12-year-old boy and a 9 year old girl-who attend Instituto Loma Bonita. At this school an attempt is occurring to include children without disabilities. The boy has learning disabilities and Attention-Deficit/Hyperactivity Disorder (ADHD) and the girl has no disabilities. The family also includes a 16-year-old sister. The father described his son as a sweet child, handsome, nice, and calm. He has attended several schools where he was reportedly aggressive. He is not aggressive in this school. The father said his son gets annoyed at his sisters. He is on Ritalin at this time for the ADHD. I asked the father what his son's problems were. He stated he did not talk until the age of two and he walked late. The father said he had a "brain map" done. He was taken to many different doctors in Mexico but he was finally taken to the United States for assistance where he was diagnosed with ADHD. At four years of age he had a special examination by a neurologist and the neurologist diagnosed the problem as a "brain problem disorder."

I asked the father how he was told about the disability by the professional and he said the doctor said he doesn't know what scientifically caused it. I then asked how other members of the family accepted the child. He stated his in-laws are having difficulty accepting him. He is the boy of the family which gives

him a special place in the Mexican home. The father reported they baby him and his son plays with younger children.

His dreams for his son include independence, a job, and an education. He hopes he will get married some day. The father feels that some of his behavioral problems stem from the father not living at home anymore. He states that he takes his son with him to his home for 24 hours every week.

Many of the dreams and aspirations these parents have for their children are similar to those of families in the United States. These parents were from higher socio-economic conditions and have been able to send their children to private schools. They had the ability to go to doctors, have diagnosis made and provide for their children. Many families in Mexico who have children with disabilities are from lower socio-economic conditions and do not have the luxuries these families have. Seligman and Darling (1999) state that families struggling to survive are exhausted and do not have the options to search for the best medical treatment or educational program. The authors state that if professionals judge families by middle class standards they are being unrealistic. Unrealistic expectations invite noncompliance.

Zuniga (2004) reports that sometimes class variations are misinterpreted as much as cultural variations and class variations can be misidentified as cultural variations. The Hispanic culture has often been ascribed the belief system of "fatalism" which may be a class variation rather than a cultural characteristic. People who are poor and have little education may see themselves as having few options and a limited sense of empowerment (Zuniga 2004).

### **Mexico City, Federal District, Mexico**

In Mexico City we visited several facilities. One of the facilities was a sheltered workshop for individuals with mental retardation. There was a strong emphasis on integration, vocational training and support. Professionals from the sheltered workshop reported that working with parents is challenging and the parents don't want the child to be independent. Often the mother will call to say they want to take a vacation and the young adult will not be available for work. Parents want the children to work as long as work doesn't interfere with the family's plans. The staff reported parents are overprotective of their children. The transition into adulthood is very hard on parents. They are afraid someone is going to take advantage of their child in Mexico City. The professionals report the parents usually accept the suggestions of the professionals and seek independence for their children. Again, this is very similar to the fears parents have in the United States about their children. I have known many families whose children with disabilities were entering the adult phase of their lives. They are extremely concerned there will be unscrupulous people waiting to take advantage of their children and unfortunately in some cases this occurs.

## **Piña Palmera, Oaxaca, Mexico**

The last area that we visited was a program known as Piña Palmera. It is a non-governmental organization which provides rehabilitation, social integration, and information to individuals with disabilities in rural communities. The Piña Palmera program is in the State of Oaxaca. Oaxaca has mountain peaks of almost 10,000 feet, caverns among the deepest in the world, and virgin beaches. Oaxaca is the most diverse state in Mexico. Zapotecs, Mixtecs, and fourteen other ethnic groups are still present in its culture and customs and the Zapotecs and the Chapinas are the two indigenous groups. Overall 70% of Oaxacan's live in extreme poverty and in the area around Piña Palmera is particularly low income. Twenty-seven percent of the homes in Oaxaca have earth floors. It is the Mexican state with the highest rate of infant and mother mortality. Eighty percent of the women have chronic nutrition problems. Many people from this region have left the area and emigrated to the United States and Canada for better opportunities. According to Flavia Ester Anau, director, Piña Palmera is trying to construct a model of rehabilitation with the community. As they describe it, it is a model of rehabilitation which is in and with the community (personal communication, January 2003).

The faculty team split into two groups and visited different areas that are served by Centro de Atención Infantil Piña Palmera. I was with the group who went on a home visit to an indigenous family in which we observed a physical therapist and a Piña volunteer provide care for two children with severe disabilities and seizure disorders. The two children were in their late teens and slept on the dirt floor of their one-room thatched hut. Animals wandered through the hut and their two-year-old brother sat and played in the dirt. The two children with severe disabilities often were treated for parasites due to lying and sleeping on the dirt floor. The group also observed a speech therapist working with a young hearing impaired girl in her home which was a thatched hut with no running water except that which was in a creek close by. The group also visited the school the hearing impaired girl attended. The class was in a one room building with a dirt floor with a blackboard. The class was being taught some basic sign language. The father of the girl with hearing impairments came with the girl to the class. It was quite evident that the speech therapist involved the family and school in the education of the girl with hearing impairment. An older girl with hearing impairment accompanied the speech therapist. The speech therapist was training the girl to assist in his work.

Many of the residents of Piña Palmera support themselves by fishing. They also grow crops on small parcels of land for their own consumption and sell what they can. Most people earn thirty pesos a day for what they can sell which is equivalent to about \$3 US. Women have hard lives defined by motherhood and wifehood. They do not have an individual identity. They are often mothers by the age of 13 and are not supported by the

father of the child (Centro de Atención Infantil Piña Palmera, 2003). When a woman gives birth to a girl the statement is made "Better luck next time" (Centro de Atención Infantil Piña Palmera, 2003). It is reported that girls are sold at an early age by their parents. Sometimes the girls meet their husband the day of the wedding. Women can't leave their husbands. Girls who are born with a disability have the most problems because they cannot fulfill their role in life as a mother. Communities are largely populated by the elderly and children because there is a large exodus of educated people out of the region (Centro de Atención Infantil Piña Palmera, 2003).

A person with disabilities is often rejected, isolated, excluded, or mistreated in this region (Centro de Atención Infantil Piña Palmera, 2003). They are called "little sick ones." Rehabilitation or integration of the child with disabilities is unknown. There is a high rate of alcoholism and intra-family violence in which people with disabilities are the most vulnerable. Families abandon their children with disabilities. Families look for miraculous cures or they give up (Centro de Atención Infantil Piña Palmera, 2003). There are many myths about why the child is disabled, which include vengeance, divine punishment or retribution, or they were cursed. All of these myths are obstacles to rehabilitation and education for the person with disabilities.

According to Flavia Ester Anau, Piña Palmera works with the families and communities to improve the lives of people with disabilities in the community. They approach their work with the disabled by providing rehabilitation services and therapy. They see their job as legitimizing the rights of people with disabilities in the community and improving their quality of life. They do this by advocating for reform, changes in education, community training, and integration of the person with disabilities into the community (personal communication, January 2004). Piña Palmera helps the families of disabled people to become an essential part in this reform. They teach the family how to have a relationship with their child (Centro de Atención Infantil Piña Palmera, 2003). They also provide information on disabilities to people through the media. They use radio and offer workshops to communities and families. The topics covered are related to health and are presented in the local language or in Spanish.

Centro de Atención Infantil Pina Palmera (2003) states that the right to education is a fundamental right in Mexico. There is a national program for the inclusion of children with disabilities in schools. It is not carried out in rural communities because there is a lack of information and resources. Teachers require workshops that will teach them about different disabilities and they need information and support to make inclusion work.

Centro de Atención Infantil Piña Palmera (2003) states that Piña Palmera is trying to achieve equality for people with disabilities in this area. They use different methodologies of intervention "in," "with" and "through" the community. They call this the Rehabilitacion Basada en y con la Comunidad

(RBC) of rehabilitation based in and with the community. Piña Palmera not only gives rehabilitation to people with disabilities but works to form and change attitudes with doctors, parents, and the authorities. They educate the family in basic rehabilitation techniques, empower the family and assist them to integrate the person with disabilities. Piña Palmera's philosophy of rehabilitation sees participation of the community as necessary in the rehabilitation process. They believe "Attention to disabilities as human rights, not charity" (Centro de Atención Infantil Pina Palmera, 2003).

Piña Palmera recognizes the importance that parents play in the lives of their children with disabilities. In an interview with Flavia Ester Anau she stated that in order to work with families and communities it is important to recognize where the family and community are in their development and begin working at this point. Piña Palmera teaches families how to advocate for their children and teaches people with disabilities how to advocate for themselves (personal communication, January 2004). This philosophy of help-giving is similar to the philosophy of family empowerment. Family empowerment is a philosophy in which help-givers assist families to become competent and capable rather than dependent (Dunst, Trivette & Deal, 1989). Piña Palmera recognizes the need to educate the community as well as the family for it is the community that will continue the support of the individual with disabilities.

The United States is Mexico's closest neighbor and it is the disability movement in the United States that has clearly influenced Mexico's right to education laws (personal communication, January 2004). Parent/professional partnership has been a very important part of the movement in the United States. Parents have become strong advocates for their children and certainly have influenced the right to education laws in the United States. The role that parents play in their child's education has been strengthened after each reauthorization of IDEA. That does not mean that parent/professional partnerships are the best they can be in the United States. Many parents still are not considered equal members of the team by educational professionals but certainly the role of parent has been strengthened over the years.

The snapshot of professional/parent relationships in Mexico that I was able to investigate is extremely small. It is hard to make any definitive statement about relationships from

the small group that I was able to meet with. What can be said is that many of the feelings and fears of the families I spoke to are similar to those of parents in the United States. The thoughts and feelings of professionals in Mexico about parents are probably similar to those held by professionals in the United States. There are few professionals that I have spoken to in the United States that would admit they judge parents but professionals do judge parents. We have poverty in the United States but not the extreme poverty that can be viewed in Oaxaca. It is the extreme poverty and the view of disability in a community of extreme poverty that is very different. The work that Piña Palmera is attempting to do in the Oaxacan state is sorely needed. The job appears overwhelming when faced with the needs of the community. When many people in a community of extreme poverty are devalued it is very easy to see that the most devalued people are the most vulnerable.

There is much more to learn about families of children with disabilities in Mexico. The information gathered is only the beginning of what will hopefully be the first of many visits to the United States' closest neighbor.

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# Practical Social-Emotional Learning Tools for Students with Specific Learning Disabilities in the United States of America

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## Abstract

*Education is a fundamental right for all children which must be guaranteed in every nation. Unfortunately, children with disabilities have been marginalized in many countries preventing them from accessing an appropriate education. Although some countries have legislation that guarantees educational rights to children with disabilities, some of the laws are not comprehensive enough to ensure that these children benefit from their educational experience. Hence, for many children with disabilities the educational experience does not guarantee them positive adult outcomes. However, some industrialized countries, like the United States of America (USA), have made significant progress in this area by establishing comprehensive laws to ensure that the rights of children with disabilities to education are guaranteed through provisions that entitle them to an appropriate education. Because of this, the author uses the special education law in the USA as a benchmark in examining special education law in Zimbabwe, albeit the USA is not being treated as a gold standard but just a model.*

Throughout the United States of America, educators are increasingly recognizing the importance of promoting emotional resiliency and positive social development in youth by incorporating social and emotional learning (SEL) instruction within the general curriculum (Elias, 2004; Elias, Bruene-Butler, Blum, & Schuyler, 2000; Zins, 2001). SEL is defined as the “knowledge and skills that children acquire through social and emotional-related education, instruction, activities, or promotion efforts that help them recognize and manage emotion, engage in responsible decision making, and establish positive relationships” (Zins, 2001, p. 441). An increased appreciation for SEL instruction has arisen following awareness of the significant effects of SEL on critical school and life outcomes. Improved SEL serves to prevent high-risk behaviors, such as substance abuse, delinquency, and violence (Elias, Lantieri, Patti, Walberg, & Zins, 1999; Ross, Powell, & Elias, 2002; Wilson, Gottfredson, & Najaka, 2001), and is also associated with positive school-related outcomes, such as social acceptance, problem solving skills, stress management, and academic success (Elksnin & Elksnin, 2004; Zins, Weissberg, Wang, & Walberg, 2004). Greenberg and colleagues (2003) found that effective social and emotional instruction improves students’ abilities to recognize and manage emotion, understand and appreciate the perspectives of others, establish positive goals, make responsible decisions, and cope with interpersonal conflicts. Long-term positive life outcomes are also associated with SEL, including high school completion, healthy marriage,

stable family, and employment success (Elias et al., 2000; Elksnin & Elksnin, 2004; Zins et al., 2004).

School-based initiatives that encourage SEL are particularly important for students with Specific Learning Disabilities (SLD). “Specific learning disability” is defined in the United States by the Individuals with Disabilities Improvement Act (IDEIA, 2004) as:

a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The terms does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, or mental retardation, or emotional disturbance, or environmental, cultural, or economic disadvantage (20 U.S.C. § 1401 [30]).

It is noteworthy that the U. S. federal definition of SLD neglects to address the social and emotional deficits of students with SLD. The literature is replete with research indicating students with SLD tend to struggle with SEL (Bryan, Burstein, & Ergul, 2004; Elksnin & Elksnin, 2004; Gresham, Sugai, & Horner, 2001; Kuhne & Wiener, 2000; Nowicki, 2003; Romasz, Kantor, & Elias, 2004; Ross et al., 2002; Elias & Tobias, 1996). Indeed, deficits in SEL have been observed in research conducted in the United States and in nations across the globe, including Canada (Whitley, Lupart, & Beran, 2007), China (Yuehua, 2004), and Norway (Holden & Gitlesen, 2007). Therefore, it

is imperative that educational planning teams consider the SEL needs of students with SLD.

The purpose of this article is to (a) provide practical school-based strategies for addressing the SEL needs of students with learning disabilities, (b) provide recommendations for successful implementation of SEL initiatives, and (c) discuss common barriers to SEL implementation.

### **Selected Intervention Strategies to Address the SEL Needs of Students with SLD**

We offer practical, research-based suggestions for promoting growth within the following four critical social and emotional skills: emotional knowledge, emotional expression, empathy, and social problem solving. These particular skill areas have been recognized as critical skills within the five key SEL competencies defined by Zins and colleagues (2007): self-awareness; social awareness; responsible decision-making; self-management; and relationship management, and are included within the social emotional skills set defined by the Collaboration for Academic and Social Emotional Learning (CASEL, 2003): know yourself and others; make responsible decisions; care for others; and know how to act.

Suggestions offered below must be considered within the context of the culture of the student and the surrounding community. It is important teachers understand the diverse cultural backgrounds of their students because different cultural groups have different emotional norms. Although there is a degree of universality in the interpretation of facial expressions, the manner in which individuals describe, interpret, and express emotions varies significantly across cultures (Scherer & Wallbott, 1994). For example, when compared to individuals from collectivist cultures (e.g. Eastern Europe and Asia), those from individualistic cultures (e.g. Western Europe and North America) tend to express emotions more liberally (Niedenthal, Krauth-Gruber, & Ric, 2006).

#### *Emotional Knowledge*

Students with SLD often have difficulty recognizing their own emotions, particularly those beyond the basic emotions of happy, sad, and mad (Elias, 2004). To develop appropriate emotional understanding, students must learn to identify complex emotions and the vocabulary necessary to articulate a wide range of feeling states. Teachers can employ a several practical strategies to facilitate emotional knowledge. For instance, teachers can instruct students to identify an emotion by linking thoughts and body reactions (e.g., clenched fists, furrowed brow, sweaty palms) to feelings. Students also benefit from vocabulary lists containing more complicated emotional labels (e.g. frustrated, discouraged, perplexed, elated, and delighted). It is important to incorporate opportunities for practice using “I feel...when...” statements. For example, writing assignments

can help students identify a situation associated with an emotion, such as, “I feel angry when \_\_\_\_\_,” or identify an emotion often associated with a situation, such as “I feel \_\_\_\_\_ when I get a poor grade on a test.”

#### *Emotional Expression*

Instruction in emotional knowledge is critical; however, students also need explicit instruction in socially appropriate emotional expression. Students should be taught that intense emotional states, like anger, are normal reactions to aversive situations. However, such strong emotions require regulation. Students learn that they can consciously choose how to respond, rather than feeling helpless in the face of anger, limited to outbursts (externalization), or suppression (internalization) of intense emotions (Merrell, Carrizales, Feuerborn, Gueldner, & Tran, 2007).

Practical strategies for coping with stressful situations and pro-social emotional expression can be implemented in the classroom. A graphic or a drawing of a pressure gauge, barometer, or thermometer can facilitate the discussion and understanding of the range of emotional intensity. Thermometers can be used proactively, prior to emotional events, to discuss how one might appropriately react to emotions that are less intense or cool, e.g. relaxed, to more emotions that are more intense or hot, e.g. anger (Elias, 2004). Additionally, “If-then” statements may be used to link behaviors to outcomes or consequences, “If my temperature is hot and I am feeling angry, then I will use my anger tools (count-down, self-talk, etc.). If my temperature is hot and I don’t use my tools but yell at my group partner, then I will get in trouble (detention, call home to parents, etc.) and may lose a friend.” Thermometers can also be used “in the moment” by referring to the thermometer to help the student identify his or her emotion, the level of emotional intensity, and an appropriate means of expressing the emotion.

To help students cope with intense situations, teachers can model strategies that promote mental and physical relaxation, such as stress awareness and coping techniques (Merrell, 2001). It is important to inform students how stress affects people mentally and physically. For example, students learn the physical and mental cues to better identify when they are stressed, e.g., stiff neck and shoulders, clenched teeth and jaws, upset digestion, irritability, and racing thoughts. After they have learned to recognize feeling stressed, students should also learn coping techniques. Teachers can model techniques to promote physical relaxation, e.g. deep breathing and gradually relaxing parts of the body, and mental relaxation, e.g. counting backwards, calming self-talk, and imagining a serene environment. Further, students may benefit from opportunities to practice relaxing their bodies and minds before tense situations (e.g. prior to the administration of high-stakes tests, a common occurrence in American schools).



When students with SLD have difficulty understanding the cognitive and emotional perspective of others or how to appropriately interpret social cues, instruction in perspective taking may be beneficial. There are many practical instructional strategies that may promote the development of empathy skills. Basic recognition of emotions in others can be facilitated by presenting pictures of different facial expressions with the corresponding emotional labels captioned. Students may take turns being a “detective” and using physical cues or “clues” to help them interpret others’ emotions more accurately (Merrell et al., 2007). Students may also play a form of “feelings charades” during which a student and/or the teacher acts out an emotion and the students take turns identifying the target emotion by the physical clues. Teachers can also engage students in activities where different individuals take on play-like roles to act out different perceptions and reactions to the same scenario. Then, a discussion can cover why individuals do not have the same response to the same situation. For example, a teacher could provide a realistic scenario to which students relate, such as the closing of a school. The objective is to illustrate how different individuals may feel very differently about the same situation. Adam may feel happy that the school is closing down because he is now able to attend the school his friends attend. Esmeralda may feel angry that the school is closing down because she can no longer ride her bike to school but will now need to ride a bus to the new school. Mr. Malik may feel sad that the school is closing down because he has worked for many years in the building and will miss it. This lesson can include differing perspectives from different cultures and can provide a foundation upon which to build the critical skill areas of respecting others and appreciating differences.

#### *Social Problem Solving*

Students with SLD are likely to experience difficulties in social problem solving skills, such as poorly developed conflict responses (e.g. fight or flight), and overly negative thinking patterns (Cohn, Meshbesher, & Teglassi, 2004). Conflict, and the stress and frustration it often accompanies, can be managed by the following the coping strategies previously described in conjunction with a problem solving model. An effective social problem solving model may include basic steps, such as: identify the conflict; brainstorm solution ideas; identify a mutually agreeable solution; and make an agreement (Merrell et al., 2007). To curtail overly negative thought patterns, teachers can provide opportunities for students to practice more optimistic and rational methods of approaching problems. Situations similar to the following could be discussed: “During a group activity, Larissa disagreed with Jamar’s idea. Jamar could interpret this situation by thinking one of the following: (a) Larissa does not like me, (b) Larissa doesn’t think I have good ideas, or (c) Larissa disagrees with this idea. Which of Jamar’s thoughts is most likely or most rational?”

SEL instruction may produce initial gains within the instructional setting, but for skills to maintain and generalize, a concerted effort must be made. When skills have been explicitly taught and rehearsed in the instructional setting, educators should plan to encourage the demonstration of skills over time in different settings and contexts. Educators can precorrect students by reviewing expectations or anticipated difficulties that students might encounter, remind students of acquired skills by providing prompts and opportunities to practice skills, and reinforce successful skill implementation (Langland, Lewis-Palmer, & Sugai, 1998; Sugai, Bullis, & Cumblad, 1997). For example, prior to administering a test, Ms. Kwan precorrects by proactively reminding her students to use the mental and physical relaxation techniques they have previously learned. During the test, Ms. Kwan may notice a student appearing quite distressed; at this point, she reminds this student in the moment to use the physical and mental relaxation techniques. Finally, if Ms. Kwan observes a student using the relaxation techniques (e.g. breathing deeply) she reinforces this student via behavior-specific praise or other class-wide or school-wide rewards. To increase the effectiveness of the interventions, teachers should inform both teaching and support staff of these SEL efforts so they can also precorrect, remind, and reinforce specific skills in other classrooms and in non-classroom settings such as hallways, cafeterias, and playgrounds. Additionally, students may benefit from “booster lessons” where critical skills are re-taught after a period of time or when needed.

#### *Selecting SEL Programs*

Whether an SEL program is developed at the local level or a packaged program is purchased, general recommendations apply for successful implementation. First, students tend to acquire social and emotional skills in a comparable manner to which academic skills are acquired. In fact, social, emotional, and behavioral skills may be as cognitive or brain-based as literacy and mathematics (Bar-On, Tranel, Denburg, & Bechara, 2003). Therefore, when implementing SEL programs, it is important that instructors incorporate instructional methodologies found to be most effective for students with SLD. Evidence-based methodologies include explicit instruction, skill modeling, rehearsal, and frequent feedback (Elias, 2004; Kavale & Mostert, 2004).

Educators now have a relatively wide selection of SEL programs for teaching skills within the school setting; unfortunately, the implementation of SEL programs is a challenging feat for American educators due to the academic demands of the No Child Left Behind Act, time constraints, and limited resources. Most American school systems, strapped for time and money, need effective and feasible SEL programs. Programs may be more feasible if they require relatively little preparation time and do not necessitate mental health expertise to implement with fidelity. Programs that follow predictable

formatting may help establish structure and routine for students and allow instructors to devote more attention to students' learning, rather than instructional design and delivery. The examples and scenarios within each lesson, however, should be modifiable to allow the use of examples or scenarios that accurately represent students' cultural experiences and developmental levels. The most effective SEL programs tend to be behavioral or cognitive-behavioral. Programs that merely provide information or instructions are unlikely to significantly impact the SEL of students (Durlak & Wells, 1997; Tobler et al., 2000; Wilson et al., 2001). Effective SEL programs must be interactive, incorporating opportunities for prosocial peer interaction. Prosocial peer relationships contribute to children's behavioral and emotional adjustment, and this is particularly true for students with SLD. Structured opportunities for cooperative peer interaction can provide students with multiple opportunities to practice SEL skills and thereby facilitate the development of positive peer relationships.

Some examples of research validated SEL programs include: Promoting Alternative THinking Strategies (PATHS; <http://www.channing-bete.com/prevention-programs/paths>), Check and Connect (<http://ici.umn.edu/checkandconnect>), and Second Step (<http://www.cfchildren.org/programs/ssp>). For more comprehensive guides to SEL programs, the reader is referred to Zins and colleagues (2007), CASEL (2003), and O'Brien, Weissberg, and Shriver (2003). Examples of centers, institutes, and projects which contain additional SEL resources include Collaborative to Advance Social and Emotional Learning (CASEL; [www.casel.org](http://www.casel.org)), the Center for School Mental Health at UCLA (<http://smhp.psych.ucla.edu/offcampus.lib.washington.edu>), the Project for Social and Emotional Learning ([www.tc.columbia.edu/academic/psel](http://www.tc.columbia.edu/academic/psel)), the United States Department of Health and Human Resources Substance Abuse and Mental Health Services Administration (SAMHSA; [www.samhse.gov](http://www.samhse.gov)), and the Oregon Resiliency Project (<http://orp.uoregon.edu>). For international SEL resources, the reader is referred to the following sites: Tribes TLC: A New Way of Learning and Being Together ([www.tribes.com](http://www.tribes.com)), Peace Works ([www.peaceeducation.com](http://www.peaceeducation.com)), and Roots of Empathy (<http://www.rootsofempathy.org>).

### *Tips for Successful Implementation*

It is important for instructors to anticipate and plan for common barriers to SEL program implementation. Educators commonly question how to find the necessary time to implement comprehensive SEL programs. Often, solutions are found in the more efficient use of existing minutes, collaboration with counselors and school psychologists, and restructuring student schedules to free a section of time for supplemental instruction. With many schools focusing exclusively on academic initiatives, it may be difficult to establish a sense of priority for SEL efforts. Although the number of educators who view SEL as an

educational priority is increasing, there still remain individuals that believe SEL skills are naturally acquired or "should be taught at home." Sadly, many students with SLD fail to develop positive social, emotional, and behavioral skills by implicit means. Leaders in the field of SEL contend that these skills must be explicitly taught in the manner that reading, writing, and math skills are taught (Ross et al., 2004). Therefore, it is important to build consensus among staff regarding the need for explicit instruction in this area.

SEL initiative efforts must be coordinated with other school-based, family, and community programs. Too often, SEL initiatives yield somewhat disappointing results due to efforts that are short-term and disjointed (Greenberg, Domitrovich, & Bumbarger, 2001; Kam, Greenberg, & Kusche, 2004; Zins et al., 2007). SEL instructional efforts should be coordinated with other school-based and community programs such as anti-bullying initiatives and substance abuse prevention programs. To further ensure the optimal maintenance and generalization of key skills, it is important to collaborate with families. Prior to the implementation of SEL instruction, it is necessary inform families via newsletters, meetings, or phone calls. Coordinated efforts that involve families may contribute to more culturally responsive programs increased outcomes.

Schools implementing SEL initiatives should draw upon existing resources and expertise within the district. If the district employs staff with expertise in social-emotional and/or behavioral areas, such as school psychologists, school counselors, special educators specializing in Emotional and Behavioral Disorders, and behavior support coaches, their support and collaboration is highly encouraged.

To ensure students are responding to SEL instruction, both formative and summative assessments are needed. Formative measures facilitate data driven instructional decisions while learning is taking place, and summative measures assess attained skills after learning has occurred. Formative measures may include curriculum-based assessments to assess content knowledge, direct observations of student behavior in classroom and nonclassroom settings, and daily self-monitoring point sheets. Measures that may be used in both a summative and formative manner may include parent, teacher, and student standardized, norm-referenced rating scales. Furthermore, teachers can help students set attainable yet ambitious SEL goals and assist them in developing a measurable action plan. Motivation and ownership can be facilitated by students charting their achievements and visually monitoring their own progress toward goals. If the student is of appropriate age and maturity, the student can present his or her strengths and areas in need of growth during progress meetings, such as the Individual Education Planning (IEP) meetings that are typically held annually in the United States.

## Conclusion

In light of the considerable value of social and emotional skills on student school-based and life outcomes, researchers and educators have developed an increased appreciation of school-based SEL programs in the United States. These school-based programs may be of major importance for students with SLD, who have a propensity to struggle with key social and emotional skills, including emotional education, emotional expression, empathy, and social problem solving. When considering social and emotional learning programs that target such skill domains, programs should be selected that employ instructional methodologies found to be effective for students with learning disabilities. Moreover, educators must anticipate and plan for common barriers and draw upon research-based strategies. With the widespread implementation of social and emotional learning programs in American schools, educational systems across the United States can increase the likelihood that students with SLD will achieve meaningful positive school and life outcomes.

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# **A Ray of Hope for Girls in Trouble: Alternative Education Services in a Singapore Girls' Home**

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## **Abstract**

*This paper provides a trans-cultural perspective of emotional/behavioral difficulties and a brief overview of the subculture of today's young adolescent girls. Features of successful alternative education services provided at a Singapore girls' home are also presented. This paper concludes with a consideration of implications for teachers and other professionals working with girls in trouble.*

Situated at the southern tip of Malaysia, Singapore is positioned in the rapidly developing Southeast Asia. Since her independence from Malaysia in 1965, Singapore has now become one of the most successful and prosperous countries in Asia and has achieved many world-class accomplishments. This small island nation has one of the busiest ports in the world, operates a world-class airlines, and is now recognized as an international financial, trading and business hub. Singapore is also considered as one of the most literate countries in the world (Johnstone, Mandryk, & Johnstone, 2001). In the past few years, Singapore has been listed as one of the top performing countries in math and science at the secondary levels (Smith, 2006). Singaporean students' academic achievements are now recognized worldwide.

However, just like many other countries in the world, Singapore now also faces special challenges in the area of nurturing and educating its children and youths (Chen & Tan, 2006). Over the last decade in Singapore, an increasing number of juveniles are being involved with the formal justice system and juvenile homes, and the increased rate of female offenders is noticeably greater than that of boys (Zhang, 2008). Alternative education for female juvenile delinquents has become a challenge in the modern society of Singapore (Chen & Tan; Zhang). In light of the unique social and cultural context, it may be of interest to international readers to see the impact of culture differences in shaping the alternative education services in Singapore.

This research was conducted as part of the first author's Singapore Research Academic Fund Project which aimed to investigate the effectiveness of the alternative education program in a Singapore girls' home. This article provides a trans-cultural perspective of emotional/behavioral difficulties and a brief overview of the subculture of today's young adolescent girls. In commenting on these themes, the authors draw on a body of literature (mostly from the 1990s-to date) that documents

and analyzes issues of emotional and behavioral challenges in young girls experience. Features of successful alternative education services provided at a Singapore girls' home are then presented. Finally, this paper concludes with a consideration of implications for teachers and other professionals working with girls in trouble in other nations.

## **Emotional/Behavioral Difficulties: A Trans-Cultural Perspective**

Both in the United States and many other countries in the world, there is consistent evidence that externalizing problems are more prevalent in boys, whereas internalizing problems are more common in girls (Liu, Sun, & Neiderhiser, 2001). Caseau, Luckasson, and Kroth (1994) speculate that the Individuals with Disabilities Education Act (IDEA) definition and the procedures and instruments used to identify emotional/behavioral disorders may be biased in favor of males, who typically exhibit externalizing disorders, resulting in unequal distribution of mental health services. Literature also shows that adolescence can be a challenging period for many girls, even those who have strong support from home and school (Northwest Regional Educational Lab, 1998). It is apparent that compared to boys, when adolescent girls embark on the journey of physical, emotional, intellectual, and spiritual growths, they are more likely to experience less happiness and lower positive self-esteem, but higher levels of anxiety and more struggles. Therefore, for girls with emotional/behavioral difficulties (E/BD), adolescence is a time of heightened psychological risk.

A look into the literature also indicates that in both the western and eastern societies, today's contemporary culture is shaping the experience of adolescent girls in some critical and troublesome ways. Suicidal behavior among children and adolescents is a major public health problem in many countries in the world. In the United States of America

(U.S.A.), researchers (e.g., Kauffman & Landrum, 2009; Northwest Regional Educational Lab, 1998) have found many girls experience depression, family conflicts, disturbing eating habits, and suicidal attempts). In general, there are more young women than young men that attempt suicide, and ninety percent of adolescents exhibiting eating disorders are girls (Miller, 1994; Portner, 2000). Among Australian teenagers, suicide is the most common cause of death after car accidents (“Body image issues for women”, 2007). In Japan, the suicide rates go up every year and a large percentage of young Japanese girls are on medications for mental stress and emotional disorders (Ong, 2002).

Back in the 1990s, researchers found that eating disorders did exist among females in many non-Western cities such as Hong Kong (Lee, Ho, & Hsu, 1993), Malaysia (Goh, Ong, & Subramanian, 1993), and India (Khandelwal, Sharan, & Saxenda, 1995). More recently, Hesketh, Jian Ding, and Tomkins (2001) found that in China, smoking rates among female youths are low (5.4%), yet proportionately more girls than boys smoked very early. Sun (2007) reported that anorexia nervosa and bulimia have become a serious problem in Singapore, and the majority of the sufferers are young females in their early to late teens. Our research on female juveniles in Singapore also shows that over the last decade, an increasing number of juveniles are being served in the formal justice system and diversion programs (i.e., programs such as the girls’ and boys’ homes that attempt to deal with offenses outside the formal correctional system) due to offenses such as stealing, involvement with gangs, and dealing drugs.

In fact, many of today’s young women and girls are falling prey to cycles of destructive behavior and crime that lead to incarceration and broken lives. Statistics show that in the past few years, two prominent patterns in female juvenile delinquency trends have emerged. First, the number of girls arrested has increased at a faster rate than that of boys. This trend holds true for girls of all races in both the United States and Singapore. According to the United States of America Federal Bureau of Investigation (FBI), between 1989 and 1998 the number of girls arrested had increased 50.3%, as compared to only 16.5% for boys (Chesney-Lind, 2001). In 1999, FBI also noted that every year, girls account for one out of four arrests of young people (Chesney-Lind). In Singapore, official statistics from the Ministry of Community Development, Youth and Sports (MCYS; 2004) shows that in the year of 2002, there were 383 admissions (male: 304; female: 79) to MCYS Juvenile Homes. The number rose to 576 (male: 442; female: 134) in 2003, with an increase of 45% for males and 70% for females. While the majority of these juveniles are boys, the increase rate of female offenders is noticeably greater than that of the boys. Second, in recent years girls are being arrested for committing more violent crimes (Chesney-Lind).

With the increase of offenses committed by females, adolescent girls have presented challenges to the juvenile justice system as a result of academic difficulties, high

incidences of victimization (physical, sexual and/or emotional) and significant health issues (Adams, Brooks, & Rose, 2001; MCYS, 2004). However, one national study on juvenile programming conducted in the United States indicates that among the 443 juvenile program evaluations conducted since 1950, 34.8% of these programs only served males and 42.4% served primarily boys (Chesney-Lind, 2001). In 1992, only a meager of 2.3% of juvenile programs was for girls and 5.9% served primarily girls. Although these studies were conducted in the American context, their findings shed new light on what can be done in other countries in terms of delinquency prevention and intervention.

With more girls going through the juvenile system, understanding the risk factors that affect girls is crucial. Fortunately, research on juvenile delinquency has been well-established, and there is a plethora of studies on the risk factors that exist for adolescent delinquency and offenses. Some of the recognized risk factors include negative attitude toward school, low self-esteem, negative body image, lack of adult supervision, physical and sexual abuse, negative peer group/involvement with gangs, substance abuse, bullying, and early sexual behaviors as well as family factors such as separation, divorce, and stepfamilies (e.g., Chesney-Lind & Shelden, 2004; Lloyd, 2005; Northwest Regional Educational Lab, 1998). Though many of the factors listed above impact both boys and girls, factors such as mental health problems, abuse, and negative body image issues are more common among females and are, therefore, likely to differentially relate to juvenile delinquency. Risk factors are cumulative, the likelihood of having behavioral or mental health problems will increase when one has more risk factors. Though not all risk factors will put girls on a given trajectory toward delinquency, prevention and intervention should be programmed to decrease risks and increase girls’ resilience. In addition, girls’ routes into juvenile justice system and their needs while in the programs are often different from those of boys. Serious criminal behavior is rarely the reason for girls’ admission to the juvenile system; their offenses often result from problems in family relationships, family or professional concerns about moral and sexual behaviors, or substance abuse (Lloyd, 2005; Northwest Regional Educational Lab, 1998).

### **Subculture of Today’s Young Adolescent Girls**

A number of studies of teenage girls’ subcultures in the U.S.A. provide useful insights about the conflicts adolescent girls experience and the concerns they express. Taylor (1993) identifies these three conflicts as the domesticity/paid work conflict in relation to their futures, the “slags or drags” conflict relating to sexuality, and the adolescence/femininity conflict relating to maturity. Street (2005) argues that teenage girls experience conflicts resulting from the contradictory messages they receive about how they should behave. As a result, girls tend to judge one another on dominant cultural ideals of femininity, and are more likely to talk about who is popular and why, about

the different groups in their schools, about fashion trends and of course, boys. Too often, the pressure to match up and their hopes for independence and freedom, or simply desires to please others, often cause girls to make poor decisions and over exert themselves at the expense of their health and pleasure. For this reason, Stabiner (2002) argues that girls' schools offer great freedom and provide a girl with the opportunity to be herself.

In view of our sexually explicit contemporary cultures, author Wendy Shalit (2000) has a different proposal for young women. In her book *A return to modesty: Discovering the lost virtue*, Shalit offers a sustained defense of chastity, extolling the virtues of 19th century social and sexual norms, which took the culture by storm. She argues that the traditional feminine virtue of modesty is a quality inherent in girls, and that a return to modesty may place women on equal footing with men. Shalit also believes that modesty is the solution to many of the problems—from sexual harassment to depression to eating disorders—faced by young women today. Shalit's work represents the first major attempt to provide an intellectual framework for "true love waits" and the rest of the pro-virginity movement.

Historically, in the context of the U.S.A. and many other cultures alike, there were more years of girlhood than teens experience today. Although the Girl Scouts or the Young Women's Christian still exist in many cultures today, one hundred years ago there were many other organizations devoted to engaging girls in feminine, healthy activities (Brumberg, 1997). Many girls spent time each week participating in handicrafts, nature study, literature, music, and charitable works, which kept them engaged and busy (Brumberg). Besides the elements of religious faith and morality in these organizations, girls also found support and friendship in the activities. And the attention they received from their leaders, young adult women to whom they were typically not related, conveyed the sense that they were valued and cared for by the society. Today, societal changes have made a dramatic impact upon the lives and experiences of young women and girls. Although today's girls reach physical maturity earlier, the societies they are in provide little guidance and social support for them, a situation that leaves them unsupported in their development and extremely vulnerable to the excesses of popular culture and to pressure from peer groups.

In the late 1990s, a few youth workers from Singapore began to campaign for comprehensive services for girl with emotional/behavioral challenges. As a result, a girls' home was established with the aim to provide a refuge for girls in trouble. Today, the home is one of the two residential programs for at-risk girls and female juvenile delinquents in Singapore. It serves an average population of 60, grades 6 through 12, from various regions of Singapore. The current total population of the facility is 93% Chinese, 4% Indians, 3% Malay and others. Review of the residents' records also reveals that about 70% of the residents in the research site are from low income families in Singapore.

Due to the fact that currently there is no consensual definition of E/BD or standard and reliable screening instrument for children and youth at different ages in Singapore (Chen & Tan, 2006), residents in the home do not have a formal diagnosis of E/BD. However, they have a history of significant behavioral, emotional, social, and school related problems at their home campuses. Offenses committed by the girls range from status offense (i.e., crimes only a minor can commit such as running away, truancy, and curfew violation) to property crime, dealing with drugs, and rioting.

### **Features of Successful Alternative Education Programs for Girls with E/BD and Girls' Perceptions of Their School Experience**

Program evaluations indicate that integrated academic and vocational education, career development, and work-based learning contributed to successful results (Chesney-Lind & Shelden, 2004; Northwest Regional Educational Lab, 1998). As Conchas and Clark (2002) have discovered, the connected and focused curriculum of a career academy gave students "a solid foundation to pursue their college and career goals. They affirmed their professional expectations and remained optimistic despite adversity (p. 305)."

Staff in the home recognizes that one of the most powerful intervention strategies for girls with E/BD is to deliver education that foster academic success and positive changes. However, educating girls with E/BD involves more than teaching them the basic academic skills. It means preparing the girls to master life challenges by focusing on creating healthy attitudes, behaviors, and lifestyles, empowering them to succeed in the face of trials and transitions in life, and giving them skills to help them realize their potential. But how can educators and professionals put these principles into practice? To meet the special needs of the residents and give them a second chance to pursue academic studies, in 2004 a Learning Center was established. Today, the Learning Center is supported by a multidisciplinary team of teachers, counselors, and social workers who are committed to addressing the concerns and conflicts young girls experience and helping the girls in their journey of learning and growth.

To provide a solid framework and general principles for interventions in the home, staff at the Learning Center conceived and proposed the E-force theory which is about the forces of influences that make the person who she is. The E-theory discusses the stages of existence, exploration and experience and looks into the developmental stages of a student. The core belief the E-theory is to empower the student and transform the energy of the student into a positive influence (A. Choo, personal communication, November 7, 2006). Staff in the home believes that it is essential for the student to understand her true identity and senses her purpose so that she will make the change and progress gradually. By incorporating the E theory into every learning opportunity, the adolescent girls can hone their critical

thinking skills, improve their self-esteem, and strengthen their academic abilities. In practice, the E-theory is translated into three pillar elements: experiential learning opportunities, personal development program, and the mentoring services.

### *Experiential Learning Opportunities*

The Learning Center academic program primary deals with the girls' concerns in academic performance and future. The Learning Center prides itself on developing student self-awareness. At the Learning Center, students are encouraged to discover their talents and abilities and teachers are therefore able to provide learning opportunities that recognize the girls' multiple intelligence and intrinsically motivate them to embrace learning. Through discussions, journal writings and various other activities, teachers and staff gain insight into the students' varied abilities and interests. Interestingly, the majority of students being referred to the Learning Center are "right brain dominant," which means that they have a tendency to be intuitive and creative, and need hands-on and guided experiential learning activities.

Girls reported that they feel empowered to pursue learning when they knew lessons are designed to capitalize on their strengths. When including experiential learning in differentiated lessons, teachers increase the potential to foster positive learning outcomes. In addition, by incorporating the multi-sensory activities, students are enabled to obtain new information that reinforces new knowledge. In the meantime, the learning process became more engaging and fulfilling when students are encouraged to interact with the teachers and teaching materials. Indeed, when curriculum materials are presented in ways that ensure all learners have meaningful learning opportunities, students are more likely to take ownership of their educational experience.

Staff at the Learning Center recognizes that school attendance does not necessarily equate to the commitment to learning, as some girls are unwilling or not able to participate in classroom activities, and many are "there but not there". In addition, many of the girls with behavioral problems tend to be visual-spatial learners, rather than linear-logical thinkers, therefore, opportunities are provided to help the girls learn creatively. With the hope of enhancing visual and experiential learning, learning corners dedicated to aquatic studies, botany and pet care have been set up at the Center. In addition, interested students have opportunities to go on periodic visits to pet farms, beauty salons, and various art studios. The home has become a hotbed of creative expression. Girls commented that the introduction of a specialized department means that there is little idle time and the day is more interesting and busier, and that they are able to lead healthier and productive lifestyles.

It is also apparent that active learning that involves the girls in the decision-making process and with the "real world" is more effective than the traditional show-and-tell methods. However,

in the majority of the mainstream schools, while many teachers and staff tirelessly find ways to make sure the girls' voices are heard, detailed target setting and specification of curriculum content often hinder the girls from making choices about their own learning.

A key feature of the Learning Center is its recognition of the importance of the social and emotional aspects of girls' learning. With the guidance of the E-force theory, teachers at the Learning Center applied working knowledge of each student's past and current developmental paths. They hold that every student's progress along these paths is both predictable and unique to the individual, and teachers need to understand what developmental paths a student has traveled in order to understand her receptivity to learning in the present.

Recognizing that quality education builds character as well as academic proficiency, teachers and staff at the Learning Center often discuss with the girls issues related to different values, religions, politics, music, and other aspects of the popular culture. Girls are given opportunities to explore and to be challenged about their values and attitudes toward topics they are interested. They are encouraged to search information from the Internet, movies, books, and periodicals that supported or contradicted to their views. Examining information from various sources also helped them to interpret data effectively, to formulate intelligent opinions, and most of all, to strengthen their critical thinking skills.

Indeed, teachers and staff in school play an important role in the girls' lives. Teachers can help the girls to embrace who they are by respecting the individuality of each of them, and encourage resiliency factors and life skills that help them make a positive transition to womanhood and prevent future delinquency. However, in Singapore, many mainstream schools are not sufficiently equipped to handle students with major behavioral issues (Chen & Tan, 2006). Other than the school counselors who help the common behavior problems, in regular schools, there is no specific resource classroom, program, or trained school staff for students with severe E/BD. It is not surprising that without adequate support, these students often end up leaving school.

It is also recognized in the home that an orientation toward the future serves as a protective factor by allowing girls to look beyond immediate life circumstances. Indeed, girls who value and aspire to educational achievement tend to have a compelling sense of the future. On the other hand, those who are dispirited about their chances of finding employment are more likely to drift away from the educational system. Alternative programs that provide authentic, engaging learning that connects school and work can instill hope in these youths. Therefore, it is essential to engage girls with E/BD as active contributors in defining their own needs and strengths and to enable them to develop some confidence in their own power and to promote participation.

To provide a more comprehensive educational program with services across a continuum of care, the home staff has been planning to set up a middle college. This middle college will be a high school which is located on a college campus. It will offer college courses and requires career education or community service as part of the graduation requirement. Students who meet the requirements will get diplomas upon program completion. As an alternative high school programs which aims to rekindle the desire to learn, the middle college in the home will offer an alternative education that better meets the needs of these students. It will be a small school setting where students have greater opportunities for guidance and improvement.

This first middle college in Singapore will be a challenge of the traditional ideas of who can go to college. Middle colleges such as this are typically made up of students of diverse backgrounds, and are operated with the understanding that not all students fit the mold of the “traditional high school student” (“Mott Middle College”, 2006). Middle colleges serve students whose needs are not being met by the traditional high school, provide college courses and give underrepresented minority students an opportunity to pursue higher education. Although these students may be just as capable of succeeding, they have turned off to education. The middle college program at home will therefore be established to provide them the support services needed to be successful.

#### *Personal Development Program.*

This program was created to help the girls deal with their concerns about their body image, identity, and relationships. It also aims to help them develop healthy attitudes, adopt healthier life styles, enhance self-esteem, empower them to manage life events, and to give them life skills to realize their potential. With this in mind, the Learning Center workshops about personal, social, and health education (PSHE), which is another major component of the personal development program, has been developed and conducted.

The PSHE curriculum adopts a Christian perspective, which recognizes the link between physical and spiritual well-being and students’ readiness to learn and achieve. It considers the pressures that young girls face as they mature, helps them to look at life’s priorities, and assess their personal foundations. It also promotes the belief that delaying sexual activity offers girls a protective factor against trauma, unwanted pregnancy, and other risks that could lead to delinquency. The level of personal practice, discourses of Christianity and feminism are interwoven in a way that is specifically intended to address the girls’ needs and concerns. All students undergo one hour of instruction, reflection and coaching from Monday to Friday in this area. Besides the discreet work, PSHE is also an integral part of school life of which many aspects also contribute to the PSHE of the students. Workshops are conducted to help girls

learn about healthy diets and life styles, issues of morality and sexuality, parenting skills, as well as assertiveness skills, communication and many other social skills.

#### *Mentoring Services*

To help girls make a positive transition to womanhood and prevent future delinquency, social support from others is essential (Brumberg, 1997; Northwest Regional Educational Lab, 1998). Social supports and protection need to be in place to guarantee that girls could have a safe childhood until their emotional and intellectual development could catch up with their biological and physical maturation. However, as mentioned previously, without strong family support, it has become all too easy for young girls to be influenced by the attitudes and values in movies, television, and peer pressure. Unfortunately, many of the girls came from broken families and were left to their own devices since they were young. Too often, these young girls had more freedom than they could handle. In the meantime, they missed positive female role models at home, and the absence of an authority figure who can discipline, guide, and help them make the value choices which so often confront and confuse them.

To deal with this address, mentoring services are set up in the home. More than half of the residents (58%) have a mentor. A mentor’s another goal is to help the girls understand how they learn best so that they can strengthen their academic abilities. According to the girls, the support and encouragement girls receive from mentors, especially older women, is very important to them, since many of them did not have friends and schoolmates who share their interest and listen to their thoughts.

Interviews with the girls show that overall they feel very positive about their new experience in the home. Other comments from the girls includes: “Experience in the home is life-changing,” “I have found new hope and a way to a more positive future as a result of the Learning Center programs”, and “Teachers here are great and I am glad that I am now here and not in the mainstream school.” Some girls also indicated that their personal growth would continue after they leave the Learning Center and that they now have a chance to reach their highest potential.

#### **Discussion and Implications for Alternative Education in other Nations**

It was previously stated that in both the western and eastern societies, it is apparent that many of today’s adolescent girls are in crisis. Though the traditional stereotype of girls is that they are gentle, compassionate, and relational, nowadays we also witness girls who bully and commit violent and rebellious acts. The conventional view that girls are the gentler gender which is made up of sugar and spice is now challenged, and with the



increase of offenses committed by girls, today's the juvenile justice systems around the world are facing an uphill task.

What implications can we draw from Singapore's experience? First, girls engaged in delinquent behavior often have multiple and unique programming needs, and the success of the Singapore girls' home suggests that programming adapted to girls' academic, personal/developmental and social needs is more likely to result in positive outcomes. At the girls' home Learning Center, the integration of academic and vocational education gives girls a chance and a foundation to pursue their academic and career goals. In addition, although the link between physical and spiritual well-being is sometimes constructed as something to fear in secular societies, in the case of the Singapore girls' home, recognizing the spiritual dimensions and the adoption of the Christian perspective are central to helping girls finding their identities, purpose in life, and personal foundations. Researchers (e.g., Alexander, 2003; Baker, 2003) also echo this and maintain that spirituality supports feeling whole and constructing a life worth living. Further, involvement with at least one significant positive adult (e.g., mentor, teacher, and parent) and communities is essential in providing effective and lasting outcomes for girls. Overall, the translation of the E-theory into the three pillar elements, i.e., the experiential learning opportunities, personal development program, and the mentoring services seems to play a key role in the program's success.

Second, as indicated in the current study, when programming interventions for girls with violent behaviors, considerations must also be given to the fact that a girl's social context, the options available to her, and the culture she lives will affect how and why she gets into trouble. Interventions for girls with E/BD must also be framed within societal expectations of girls and women. Gender roles and definitions play into how girls behave and how they are treated within the school and juvenile justice system. As suggested by Chesney-Lind and Shelden (2004), explaining female delinquency requires understanding the gender structures of society and their impact on behavior. Those gender structures include, but are not limited to, parental attitude toward achievement, expectations regarding responsibilities in the family, socialization regarding public behaviors and expression of emotion, peer and school expectations of the female and male roles, and work and career opportunities.

Thirdly, juvenile justice systems also need to develop specific programs for girls that focus on positive female development, building relationships, addressing victimization, improving self-esteem, and conflict resolution. To create and enhance programs specifically for girls, there must be a financial commitment from the government and communities to staff training as well as promotion of sensitivity towards and needs, customs, and expectations of all stakeholders involved.

Finally, many of the successful alternative education services and programs would also benefit all students. Best

practices should not be limited to girls with E/BD—a small percentage of the population. Mainstream schools can learn from these programs and operate with the best practices.

## Summary

Though has been some progress in serving the female juvenile delinquent and girls at risk, in the U.S.A. and other countries in the world, many schools and communities are still unprepared to address the specific needs of girls who are involved in or at-risk of becoming involved in the juvenile justice system. Current information about the adequacy of education services for young girls with E/BD in correctional settings is also limited. Clearly, more research is needed regarding the effectiveness of interventions and preventions programs for young adolescent girls with E/BD.

In addition, although girls still represent a relatively small number of offenders, their numbers are growing and the types of crimes with which they are charged are increasingly more serious (e.g., Chesney-Lind & Shelden, 2004; MCYS, 2004). There is much to be done to effectively guide prevention and intervention efforts and fill gaps in service for young girls with emotional/behavioral challenges.

Fortunately, there is a growing awareness of the needs of adolescent girls with E/BD who are likely to be involved with the juvenile justice system, and educators in alternative services now have a better understanding of female adolescent development. When this understanding is translated into practice effectively, alternative education programs can provide new opportunities for academic, social and behavioral success, and most of all, a new ray of hope for our troubled and troubling girls.

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# Teacher Education Students' Beliefs of Inclusion and Perceived Competence to Teach Students with Disabilities in Spain

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## Abstract

*The practical difficulties of including students with disabilities and diverse educational needs into regular classrooms are apparent in all countries around the world. Successful implementation of the policy of inclusion depends largely on teachers having the knowledge, skills, and competency necessary to make it work. This article presents the results of a study investigating current Spanish student teachers' beliefs of the inclusion of students with disabilities and perceived competence to teach them in inclusive classrooms. Results indicated that the majority of respondents agreed with the philosophy of inclusive education but feel slightly competent to teach and manage their behaviour in inclusive settings compared with the respondents perceived competence of inservice regular and special education teachers. These findings reveal ambivalence and result in several implications for the design of the new Initial Teacher Education (ITE) programs at the University of Alicante in concordance with the process of the European Convergence in Higher Education.*

In the last decades inclusion has become a preferred model for the education of all students, including those with disabilities and diverse needs. Since the passage of PL 13/1982, Act on Social Integration of People with Disabilities (Ley de Integración Social de las Personas con Discapacidad (LISMI, 1982), the Spanish government has sought to abolish the widespread use of special education schools and special classes for students with disabilities and to replace those practices with inclusive instruction in regular education classrooms for all students. Some years later additional laws were passed [Act on General Organization of Educational System (LOGSE), 1990; Act on Educational Quality (LOCE), 2002], but in each case the mandates for inclusion have been maintained or strengthened. Twenty-five years after the implementation of PL 13/1982 in 2007 only 0.5 percent of students identified with disabilities are taught in special schools while the rest of students with special needs (approximately 2 percent of total school population) are taught in regular classrooms alongside their peers [Ministry of Education and Science MEC, (2008)].

The policy of 'inclusive schooling' is being practiced in various countries all over the world and teaching students with special educational needs (SEN) in regular education classrooms is increasingly being regarded as a beneficial practice (Ainscow, 2000; Barton, & Armstrong, 2007; Peters, 2007). In Spain, inclusion has gained increasing momentum due to the Salamanca Statement, which recognized the necessity and urgency of providing education to all children and youth within the regular education system [United Nations Educational Scientific and Cultural Organization (UNESCO), 1994]. In 1994 more than 300 participants representing 92 governments and 25 international organizations met in Salamanca to further the objectives of "Education for All" by considering the

fundamental policy shift required to promote the approach of 'Inclusive Education.' The Conference adopted the Salamanca Statement on Principles, Policy and Practice in Special Needs Education and a Framework for Action.

The Salamanca Conference marked a new point for millions of children and youth who had long been deprived of education and provided a unique opportunity to place special education within the wider framework of the "Education for All" movement. The Salamanca Statement for Action proclaimed that every child has unique characteristics, interests, abilities, and learning needs and that "those with special education needs must have access to regular schools which should accommodate them with a child-centered pedagogy capable of meeting those needs." (UNESCO, 1994, para.2) The Salamanca Statement also asserted that educational systems that take into account the wide diversity of children's characteristics and needs "are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all." (UNESCO, 1994, para.2)

Since the Salamanca Conference, the inclusion movement has made significant contributions in (a) minimizing unjustified discrimination, (b) supporting the rights of children to have their SEN identified and met, and (c) developing support services and facilities to fulfill their individual needs (Disability Rights Task Force Final Report, 2004; Echeita, & Verdugo, 2004). However, although a growing body of research supports inclusion and its principles (Alemany & Villuendas, 2004; Álvarez, Castro, Campo, & Álvarez, 2005; Cardona, 2000; Fernández-González, 1999; García-Pastor, 1998; Ojea, 1999; Parrilla, 2007; Susinos, 2002), the implementation of this policy is not without its critics.

Various studies have been conducted to determine what makes teachers differ in their willingness to work with students with SEN (Avramidis, & Norwich, 2002; Gans, 1987; Scruggs, & Mastropieri, 1996). The willingness of a teacher tends to be influenced by several factors, including classroom procedures concerns, the number of different disabilities present, the severity of the disability, and the amount of teacher support available. Studies by Alemany and Villuendas (2004), Álvarez et al. (2005), García-Pastor, García-Jiménez, & Rodríguez-Gómez (1993), and Ojea (1999) conducted in Spain indicate that teachers are positive towards inclusive education, but at the same time have serious reservation about supporting the widespread placement of students with special educational needs. In contrast, Cardona (2000) in a study with preservice and inservice teachers, reported neutral perceptions of inclusion. No statistically significant differences between preservice and inservice teachers were found in judgements of benefits and concerns of inclusion; however, further examination of the results indicated that inservice teachers perceived more benefits but also more concerns than did preservice teachers. Furthermore, their perceptions divided into two major areas (a) recognition of inclusion as a basic right, and/but (b) reluctance in accepting new responsibilities in educating diverse students due to additional work load, lack of skills, and scarcity of resources necessary to teach students with special needs.

The above studies suggest that teachers who are the prime implementers of the policy of inclusion are often not prepared to meet the needs of students with significant disabilities and that a more aggressive approach is necessary to preparing general education teachers for inclusion. As teachers' attitudes are difficult to change, Beare (1985) concluded that the best approach to improve teachers' feelings of competence about teaching students with disabilities was to increase preservice training. Most studies on inclusive education have been conducted overseas and they have tended to focus mainly on inservice educators. In addition, both international (e.g., Cook, 2002; Loreman, Sharma, Forlin, & Earle, 2005; Romi, & Leyser, 2006) and national (Cardona, 2000; García-Cabero, García-Sánchez, García-González, & Rodríguez-Bravo, 1992) studies reflect a lack of research on how preservice teachers perceive the pedagogical implications of inclusion, indicating that student teachers have serious concerns related to their ability to design and deliver effective instruction for children with special needs. Moreover, preservice teachers have raised concerns about how they will cope with students with severe emotional and behavioural problems (Forlin, 2006; Heflin & Bullock, 1999; Stough, Montague, & Landmark, 2006).

The above overview points to a growing realization that teacher preparation can play a significant role in achieving the desired outcomes for inclusion. Moreover, studies of both preservice and inservice teacher attitudes towards inclusion have shown that teacher attitudes are affected by the quality of preparation received (Beare, 1985; Lambe & Bones, 2006a, 2006b; Harvey, Yssel, Bauserman, & Merbler, 2008; Winter,

2006). These studies conclude that improving and increasing training provision of the preservice phase of teacher education would be the most effective method of promoting better attitudes and competence to inclusion. As Lambe (2007) pointed out, "if student teachers complete their preservice education without having developed positive attitudes toward inclusion this will be very difficult to change and may have a negative effect on the inclusion of learners with disabilities" (p. 63). Tait and Purdie (2000) and Beare (1985) found that positive attitudes are evident in student teachers early in their initial training and suggest that improved preparation at the preservice phase would be the best point to nurture these attitudes.

Teacher education programs in Spain add difficulties to training for inclusion. Spanish regular and special educators commonly express concern that they are not prepared to provide inclusive education for students with disabilities (Cardona, 2000, 2004; Harry, 2005). Currently, teacher preparation in this country involves more than 300 programs in 51 universities that produce approximately 20,000 preservice teachers. Each training institution prepares teachers for one of seven specialties at the elementary level (Kindergarten Education, Primary Education, Physical Education, Musical Education, Foreign Language Education, Special Education, and Speech Therapy Education). All of these three-year pre-service programs already include compulsory courses on special education, but most undergraduate and post-graduate programs end with no courses on inclusive education. A review of preservice teacher training programs offered by 16 universities in this country (Cardona, Chiner, Gómez, González-Sánchez, & Lattur, 2004), highlighted the relative small number of courses in inclusive education. Of the total number of programs reviewed, only 25% included either a compulsory or elective course in special/inclusive education. However, these Initial Teacher Education (ITE) programs are going to change soon due to the process of the European Convergence in Higher Education.

In 1999, the Spanish Ministry of Education alongside with other 28 European countries (currently 46 countries) assumed the Bologna Declaration (Confederation of European University Rectors' Conferences, & the Association of European Universities, 1999). The purpose of the Bologna accords was to create the European Higher Education Area (EHEA) by 2010-11 by making academic degree standards and quality assurance standards more comparable and compatible throughout Europe. The three priorities of the Bologna process are (a) introduction of the three cycle system (bachelor/master/doctorate), (b) quality assurance and (c) recognition of qualifications and periods of study. Since then, further government meetings have been held in Prague (May 2001), Berlin (September 2003), Bergen (May 2005), London (May 2007), and Leuven/Louvain-La-Neuve (April 2009). The Bologna Declaration has put in motion a series of reforms needed to make European Higher Education more compatible and comparable, more competitive and more attractive for Europeans and for students and scholars from other continents. Therefore, as a consequence of this process

schools of education in Spain have initiated a significant reform and renewal of its initial teacher education programs, and by the academic year 2010-11 all prospective teachers will have to complete a four-year undergraduate program for initial certification in one of two majors Kindergarten Education or Primary Education. These new programs will be composed of 240 European Credit Transfer and Accumulation System (ECTS) credits distributed between basic common courses (60 ECTS credits), common courses in certification teaching subject areas (102 ECTS credits), student teaching (45 ECTS credits), elective courses (27 ECTS credits), and 6 ECTS credits for a final program project. ECTS is a standard for comparing the study attainment and performance of students of higher education across the European Union and other collaborating European countries. One academic year corresponds to 60 ECTS-credits that are equivalent to 1,500-1,800 hours of study in all countries, irrespective of standard or qualification type, and is used to facilitate transfer and progression throughout the Union. ECTS also includes a standard grading scale intended to be shown in addition to local (national) standard grades. In these new programs, it is planned that diversity and special/inclusive education content will be infused across the curriculum where all instructors will deal with SEN within subjects areas.

In the present study, we survey preservice teachers' beliefs and perceptions of specific aspects of inclusion, as well as student perceived preparedness or competence to teach students with disabilities in a time of renewal and restructuration of the ITE programs in Spain. The preservice period offers significant potential to influence positive attitudes, consequently increased concentration in this phase of teacher education would seem to provide the best means to create a new generation of teachers who will ensure the successful implementation of inclusive policies and practices. The following research questions were the focus of this study:

1. What are the beliefs, perceptions and attitudes about inclusion of preservice general education teachers at the end of their teacher training program?
2. Do these student teachers feel competent to teach students with significant disabilities, and,
3. How does their competence compare with the respondents' perceived competence of inservice general and special education teachers?

This study will provide baseline data and guidance for planning the new ITE programs at the University of Alicante as well as will promote faculty reflection on program implications with specific attention to the areas of inclusion and equity issues.

## Method

### *Participants and Context*

The study took place at the Faculty of Education, University of Alicante, institution located in the south-east of Spain. Since its founding in 1979, the Faculty of Education, as a school within an urban bilingual area, has aimed to develop child-centered

education grounded in knowledge of human development and focused on preparing students for teaching in urban bilingual settings. Although the University of Alicante is fully identified with the Bologna process, at this time ITE programs follow the traditional format of three year of study. The teacher education programs at this Faculty require a minimum Grade Point Average (GPA) in high school and to pass an exam for entry called *Selectividad*. Performance on both is combined into a university entrance score which is determinant to be accepted or not in one of the five teacher education programs (e.g., Kindergarten Education, Primary Education, Music Education, Physical Education, and Foreign Language Education). The Faculty of Education enrolls about 200 teachers annually in elementary school programs. A typical undergraduate teacher education program (e.g., Maestro: Primary Education) consists of 203 credits (1 credit = 10 hours of student work at the university). On average, 55.5 credits of general studies (core courses in education theory and pedagogy), 74 credits of major credits (courses in professional studies and certification teaching subject area), 32 credits of practicum (student teaching and other field based experiences), 48 credits of electives, and 25.5 credits of free configuration courses.

The population for the present study consisted of the 2006-07 cohort of student teachers in their last year of study enrolled for the award of Bachelor Degree in Maestro. The study involved a sample of 114 participants (students present in class the day the survey took place) who were asked to complete a survey. These participants represented each of the five major areas in the ITE programs: Kindergarten Education (18%), Elementary (62%), Foreign Language (9%), Physical Education (6%), Musical Education (4%), and no response (1%). At the time of the study, all participants had been taught the following subjects: Educational and Developmental Psychology, Sociology of Education, Theory of Education, Didactics and School Organization, Pedagogical Foundations of Special Education, Psychological Foundations of Special Education, New Technologies Applied to Education, Didactics of Maths, Didactics of Language, Didactics of Social Sciences, Didactics of Natural Sciences, and a 32-credit Practicum for a total of 171 credits. None of the students had started their Practicum (teaching interships) at the time of data collection took place. Practicums do not begin until students' last semester in the program. Participants' ages ranged from 19-49 ( $M = 23.08$ ;  $SD = 4.21$ ). Ninety-six of the respondents (84%) were female, and 16% were male.

### *Instrumentation*

A questionnaire developed by Rao and Lim (1999) was adapted and used as a measuring instrument to record the responses of the research participants. The instrument was originally written in English and translated into Spanish using a back translation procedure (Brislin, 1986). Three sections of the original survey instrument were used in this study (a)

demographic information (4 items), (b) preservice teachers' perceptions of the inclusion of students with disabilities (12 items), and (c) preservice teacher perceived competence to teach these students compared to the attributed competence to regular education teachers and special education teachers (15 items). To establish the face validity of the instrument, the translated version of the questionnaire was given to five faculty members of the Faculty of Education. They made comments and provided feedback on a few items and these suggestions were incorporated into the draft. Prior to distribution, the survey was also piloted using a sample of 30 student teachers from another university. Their feedback was also taken into account in designing the final version of the survey. Reliability was established using Alpha coefficient of internal consistency and produced the following indexes: for "Preservice teachers' perceptions of inclusion ( $\alpha = .54$ ), and for "Preservice teacher perceived competency to teach students with disabilities ( $\alpha = .88$ ).

The Spanish version of the instrument contained 32 items in total. In section I participants were asked for information about their certification area in the ITE program, age, gender, and previous contact with children with disabilities. In Section II they were asked to respond to 12 statements regarding the inclusion of students with disabilities using a Likert-type rating scale. Participants based on their knowledge/experience indicated the extent to which they agree or disagree with each of the statements by selecting among the following response choices: Strongly Disagree = 1, Moderately Disagree = 2, Slightly Disagree = 3, Slightly Agree = 4, Moderately Agree = 5, Strongly Agree = 6. This section consisted of items like: The social and emotional needs of children with disabilities are better met in special classes for children with disabilities than in regular classes (Item 1), Teaching different subjects to children with disabilities is asking too much of regular education teachers (Item 8), or Most preservice teachers who will teach in regular schools would rather not teach children with disabilities (Item 12). In Section III the respondents had to rate the competence of average Regular Education Teachers (RET), average Special Education Teachers (SET), and themselves to (a) teaching children with and without disabilities, (b) managing the behavior of children with and without disabilities, and (c) working with parents using the following rating scale: Not at all Competent = 1, Insufficiently Competent = 2, Sufficiently Competent = 3, Highly Competent = 4. Additionally, the questionnaire included one open-ended question asking the participants in what specific area(s) did they feel more knowledge/help should be given in their ITE program.

#### *Procedure*

Faculty members of the School of Education assisted in the distribution of the survey. Collection of data took place prior to the delivery of the class lecture during the fall sessions of 2006 in a core course of the program. Each copy was accompanied by a letter from the researcher explaining the study and the

questionnaire, and requested the students' participation. Potential respondents were informed that their participation was voluntary, and that data would be confidential with no implications for their grades. Permission to conduct the study was obtained from the University, Vice-Chancellor of Research and Innovation, and from the Dean of the Faculty of Education. The questionnaire took 15-20 minutes to complete.

#### *Data Analysis*

A variety of techniques were used to analyze the research data. These techniques included statistical descriptive measures, percentages, and inferential statistical techniques using a one-way analysis of variance (ANOVA). The SPSS (version 15.0 for Windows) was used to run these calculations. Findings were synthesized according to the aspects of student teachers' perceptions of inclusion, and competence to teach students with significant disabilities in inclusive classrooms comparing their perceived competence to the competence they attributed to in-service general education and special education teachers. Finally, we established a coding schema to track the topics that emerged from respondents' written responses to the open-ended question included in the questionnaire and counted the presence of the thematic indicators.

### **Results**

#### *Student Teachers' Perceptions of Inclusion*

Table 1 highlights perceptions of the respondents regarding the philosophy of inclusion. As can be seen, student teachers mostly agreed to items addressing the theoretical and academic issues of inclusive education. The majority (93%) believed that children with disabilities should not be taught in separate groups and that the needs of the majority of children with disabilities could be met in regular classrooms (78% agreed). They also showed agreement with the effectiveness of inclusion: Seventy percent of respondents agreed that the social and emotional needs of students with disabilities could be better met in regular education classrooms than in special education classrooms, and that the academic performance (92%) and the social/emotional adjustment of students without disabilities (95%) were not negatively affected by the inclusion of children with special needs.

While these perceptions can be considered clearly positive towards inclusion, when asked whether or not they believed special education teachers were better trained or were more effective than regular education teachers (RET) in teaching students with disabilities and diverse needs, a large percentage of the respondents agreed. Seventy-nine percent indicated that special education teachers (SET) were better prepared than RET to teach school subjects to students with disabilities while 61% agreed that special education teachers were more effective than RET in teaching academic subjects to students with special

Table 1

*Student Teachers' Perceptions of Inclusion*

Theoretical and Academic Issues	<i>M</i>	<i>SD</i>	Disagree %	Agree %
10. Children with disabilities should be usually taught in a separate group from children without disabilities in classroom settings.	1.78	1.06	93	7
9. The needs of the majority of children with disabilities can be met in regular classrooms.	4.40	1.11	22	78
1. The social and emotional needs of children with disabilities are better met in special classes than in regular classes.	2.95	1.18	70	30
2. The social and emotional adjustment of children without disabilities is negatively affected when integrated among children with disabilities.	1.91	.94	95	5
3. The academic performance of children without disabilities is negatively affected when integrated among children with disabilities.	1.84	.96	92	8
Instructional Concerns and Training	<i>M</i>	<i>SD</i>	%	%
5. Special education teachers use different teaching methods for school subjects from RET for children with disabilities.	3.88	.93	31	69
7. Special education teachers are more effective than RET in teaching school subjects to children with disabilities.	3.68	1.18	39	61
8. Teaching different school subjects to children with disabilities is asking too much of RET.	2.06	.96	93	7
6. Special education teachers are better trained than RET to teach school subjects to children with disabilities.	4.26	1.12	21	79
Willingness to Teach Students with Disabilities	<i>M</i>	<i>SD</i>	%	%
4. Most teachers in regular schools would rather not teach children with disabilities.	3.61	1.51	38	62
12. Most preservice teachers who will teach in regular schools would rather not teach children with disabilities.	3.06	1.52	60	40
11. Given the choice between integrating children with disabilities in the regular classrooms and special schools, I recommend the integration model.	5.07	1.11	8	92

needs. Moreover, 69% of the respondents believed that SET used different teaching methods than RET. Interestingly, when asked whether or not teaching school subjects to children with disabilities was asking too much of RET, 93% of the respondents disagreed.

Respondents were also positive when asked whether or not they would recommend the integration model. Almost all of the total cohort respondents (92%) indicated that they would recommend the inclusion model for students with disabilities. However, they were more skeptical when asked about RET willingness to teach students with disabilities: 62% agreed that regular education teachers would rather not teach students with disabilities, and 40% thought the same of preservice teachers.

*Perceptions of Competence to Teach Students with Significant Disabilities in Inclusive Classrooms*

The mean ratings of 2.67 and 2.72 (around the scale's mid point) for teaching and managing the behaviour of students with disabilities reflects that the respondents did not feel sufficiently competent both in their own instructional skills, and in their ability to control and manage the behaviour of students with special educational needs (see Table 2). Nevertheless, respondents' ratings of competence were higher for teaching and managing the behaviour of students without disabilities ( $M = 3.29$  and  $3.04$ , respectively), indicating that student teachers felt sufficiently confident of their competence in these domains as well as in working with parents ( $M = 3.44$ ).

Table 2

*Descriptive Comparisons of Respondents' Perceptions of Competence to Teach Students with Disabilities in Inclusive Classrooms*  
*Theoretical and Academic Issues*

	<i>M/SD</i>	NA <sup>1</sup> %	IC <sup>2</sup> %	SC <sup>3</sup> %	HC <sup>4</sup> %
Teaching children with disabilities					
Average regular classroom teacher	2.73/.61	0	36	55	9
Average special education teacher	3.76/.43	0	0	24	76
Student teacher	2.67/.65	2	37	53	8
Teaching children without disabilities					
Average regular classroom teacher	3.55/.53	0	0	41	57
Average special education teacher	3.29/.61	0	8	55	37
Student teacher	3.29/.55	0	4	62	34
Managing the behavior of children with disabilities					
Average regular classroom teacher	2.75/.74	2	37	45	16
Average special education teacher	3.71/.47	0	1	27	72
Student teacher	2.72/.65	3	30	59	8
Managing the behavior of children without disabilities					
Average regular classroom teacher	3.34/.64	0	9	48	43
Average special education teacher	3.36/.63	0	8	48	44
Student teacher	3.04/.66	2	14	62	22
Working with parents					
Average regular classroom teacher	3.66/.53	0	3	28	69
Average special education teacher	3.67/.49	0	1	31	68
Student teacher	3.44/.64	0	8	40	52

<sup>1</sup>NA = Not at all competent; <sup>2</sup>IC = Insufficiently competent ; <sup>3</sup>SC = Sufficiently competent ; <sup>4</sup>HC = Highly competent

Overall, respondents' perception of competence was  $M = 3.03$  while, student teachers' perceptions of RET and SET's competence was  $M = 3.21$  and  $3.56$ , respectively. These results revealed a statistically significant difference in competence between self-competency to teach special needs populations and the perceived competency attributed to RET and SET. Specifically, student teachers rated their own teaching and management skills to teach and manage the behaviour of students with and without disabilities at a significantly lower level ( $p < .01$ ) than they rated the regular education and special education teachers' skills (see Table 3). At the same time, respondents felt themselves significantly less competent than they perceived regular and special education teachers were in working with parents,  $F(2,112) = 6.24$ ,  $p = .002$ . This suggests that student teachers perceived themselves less prepared to teach students with disabilities than they thought of inservice

teachers. As would be expected, student teachers rated their skill level to teach children with disabilities and manage behaviour as not sufficient and perceived SET more competent than RET to teach these children. Specifically, the more frequent themes that emerge from the open-ended question of the questionnaire when they were asked in what specific area(s) did they feel more knowledge or help should be given in their ITE program, their answers were: learning more about IEP (Individual Educational Plan) requirements of children with disabilities, learning more instructional strategies and how to use them in inclusive environments, learning more about curriculum adaptation, learning how to deal with the behaviour of these students, and how to identify and meet specific student needs. These results add evidence to the belief that student teachers rarely perceived themselves well prepared for working with students with disabilities.



Table 3

*ANOVA Comparisons of Respondents' Perceptions of Competence to Teach Students with Disabilities in Inclusive Classrooms*

	Student Teacher <i>M/SD</i>	RET <sup>1</sup> <i>M/SD</i>	SET <sup>2</sup> <i>M/SD</i>	<i>F</i>	<i>df</i>	<i>p</i>	Direc
Teaching students with disabilities	2.67/.65	2.73/.61	3.76/.43	127.74	2	.000*	SET > RET & STU
Teaching students without disabilities	3.29/.55	3.55/.53	3.29/.61	7.85	2	.000*	RET > SET & STU
Managing behavior of students with disabilities	2.72/.65	2.75/.74	3.71/.47	89.89	2	.000*	SET > RET & STU
Managing behavior of students without disabilities	3.04/.66	3.34/.64	3.36/.63	8.35	2	.000*	RET & SET > STU
Working with parents	3.44/.64	3.66/.53	3.67/.49	6.24	2	.002*	RET & SET > STU

<sup>1</sup>RET = Regular education teacher; <sup>2</sup>SET = Special education teacher

\*Significant at 1% or above

### Discussion and Implications

The purpose of this study was to obtain perceptions from a cohort of student teachers about the inclusion of pupils with disabilities in regular classrooms as well as their feeling of competence to teach them in inclusive classrooms. The majority of respondents agreed with the philosophy and the benefits of inclusion, but did not feel sufficiently competent to teach and manage the behaviour of students with disabilities in inclusive settings. These results give support to other studies (e.g., Clough, & Lindsay, 1991) that assume that newly qualified teachers hold positive attitudes towards inclusion at the end of their preparation programs, and at the same time confirm the findings of previous studies (e.g., Cardona, 2000; Hastings & Oakford, 2003; Lambe & Bones, 2006a, 2006b; Loreman et al., 2005) which indicated that while preservice educators have a positive attitude towards inclusive education, these perceptions are contradictory. In this study, respondents clearly expressed their support for inclusionary practices because of the academically and socio-emotional benefits on students with and without disabilities, however, 40% of the respondents thought of preservice teachers that they would rather not teach students with disabilities. These findings reveal ambivalence towards the inclusion of students with disabilities and exemplify the tendency of preservice teachers to see disabilities as problems not as resources.

Additionally, the findings revealed that the respondents appeared to be more comfortable with the traditional system of special education provision than with the inclusive model as can be deduced from their responses: A large majority of respondents believed that SET are better trained (79%) and more effective (61%) than RET in teaching school subjects to

children with disabilities, and that 62% of RET would rather not teach children with disabilities. Another interesting finding was that only a minority of the cohort respondents perceived themselves highly competent (8%) to teach children with disabilities, while 76% thought of SET as highly competent compared to average RET (9%). For managing the behavior of children with disabilities, again only 8% of respondents felt highly competent while 72% thought of SET and 16% of RET as highly competent. Results of the ANOVA (univariate analysis of variance) comparisons were statistically significant ( $p < .01$ ) suggesting that the respondents' beliefs and perceived skills of RET and SET for teaching and managing the behavior of children with and without disabilities were significantly different.

In light of these findings, the present study results in several implications and recommendations for the design of the new ITE programs at the University of Alicante. First, there is a need for the new programs to examine the new structures proposed for the Ministry of Education and Science (MEC, 2007a, 2007b, 2007c) to design ITE programs accordingly with the Bologna Declaration, and the extent in which these new programs will provide student teachers with exposure to issues of diversity, particularly, in terms of disability. Considering the results of the ANOVA, it is imperative that student teachers in the new ITE programs are prompted to (a) raise their level of awareness regarding issues of disability, and (b) begin to see children with disabilities as resources and opportunities to learn and understand student characteristics more deeply giving them opportunities that have the potential to develop not only preservice teachers' knowledge but skills and empathy with the learners' abilities. Therefore, we recommend that the new programs consider what more could be done to further develop

preservice teachers' knowledge and skills regarding their initial knowledge and experiences they have had with unfamiliar educational contexts and learners. At the same time, it is very recommendable to explore ITE faculty's understanding of disability and inclusionary issues. As mentors and instructors, it is critical that they be actively involved in furthering their own understanding and practises related to issues of inclusion of students who differ. Third, these findings imply that the ITE program needs to reconsider the ways in which the curriculum addresses: (a) issues of equity within the educational system; (b) the teacher's responsibility for addressing these issues; and (c) the impact that equity issues can have on the learner's opportunities for effective instruction and achievement. Finally, we suggest that the ITE program instructors participate in a series of conversations with practitioners in the field in order to determine curriculum needs in regarding subjects and activities that address ITE students' understanding of equity issues in the education of children with disabilities and other specific educational needs.

In conclusion, while the results of this study provide valuable insights into student teachers perceptions of the inclusion of children with disabilities and their perceived competence to teach them, they also substantiate the assertion that the solutions for how best to prepare teachers may begin with understanding how teachers beliefs are integrated within the classroom (Taylor & Sobel, 2001). Future studies need to encompass longitudinal research in order to link beliefs and attitudes to practice, and compare/constrast if the ITE new programs contribute in a significant way to better prepare student teachers for inclusion. Surveys involving larger samples and incorporating focus groups are required for future research on this topic.

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# Developing Cultural Competency in Adult Pre-Service Teachers Helps Diverse Learners: Graduates' Perspectives in the United States of America

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## Abstract

*This study reports the results of an electronic survey and two focus groups that included former Master of Arts in Teaching (MAT), students who took a required multicultural education course. As instructors in a pre-service teaching program for adult learners, we used a matrix of relevant materials to promote cultural competency within the framework of the required course. We wondered what course experiences benefitted our former students once they were actually teaching learners with unique needs. We accessed our former graduates to learn how to improve course content to increase future teachers' cultural competency. The participants of the study offered suggestions for increasing the cultural competency levels of teachers in ways that should improved classroom practices, and offer more effective strategies for working with learners with diverse needs.*

## Introduction

The importance of the impact of culture on the lives of children cannot be understated. The level of cultural competency that a teacher brings to the classroom is paramount to higher learning outcomes for students. However, according to a 2002 report from the Southern California Consortium on Research in Education (SCCORE) group, the demographics of teachers are dramatically different from the demographics of learners entering the school system in the United States of America (U.S.A.). In fact, eighty percent or more of classroom teachers are female, middle class, from homogeneous Euro-American family experiences, and native English speakers; not at all similar to the demographics of students entering schools in the U.S.A. today (Hodgkinson, 2000). In response to this disconnect, many pre-service education programs offer a course in multicultural education; including content that addresses the needs of diverse learners.

As two veteran professors of multicultural education courses, we became curious about how or if our former pre-service students, who are now teachers used what they learned in our courses to support the diverse needs of students in their own classrooms. We wanted to know if our courses increased

our pre-service student's level of cultural competency. We were interested in how the course influenced their classroom practices after graduation when working with diverse learners. Our curiosity grew out of the fact that our pre-service teachers represented the traditional demographics for classroom professionals, as previously outlined. Collectively, we wanted to ascertain: (a) did we provide pre-service teachers the needed skills for developing and maintaining a level of cultural competency as professionals when engaging with diverse learners; (b) what impact did our curriculum frameworks have on our former students as they stood in positions of power as teacher; (c) what specific skills did our former pre-service teachers find useful from the continuum of intervention tools and information provided through our courses for working with diverse learners; and (d) how are our former students using their understanding of the impact of privilege, power, and social barriers to work effectively with the diverse learning needs of students? In this article, we provide a brief overview of relevant literature, describe our research project and the instructors' backgrounds, and, most importantly, present our former students' perspectives on what they learned in our multicultural education courses, as well as their suggestions for designing a more effective course.

## Adult Learners and Cultural Competency

In the 1960's multicultural education began as a way to increase conversations about the impact of culture on the learning environment for both students and teachers (Sleeter & Delgado, 2004). Although addressing diversity has become a central theme in the preparation of new teachers in the U.S.A. data show that teacher education programs have had little success in effectively preparing teachers for urban schools and to work with diverse learners demonstrating broad and challenging academic needs (Banks, 2001; Cochran-Smith, 2004; & Haberman, 1994). García and Guerra (2004), as well as others, emphasize that the majority of teachers and school staff are well-intentioned and caring individuals, but that has not been enough to bring about a level of cultural competency that impacts the learning experience for students with diverse needs in a positive way.

Modeling effective strategies, that effect cultural competency is essential if teacher education wants to influence pre-service learners and ultimately K-12 students. Nevertheless, this is not a simple task and teacher education programs are at the forefront of the intervention solution (Zeichner, Grant, Geneva, Gillette, & Villegas, 1998). A key step is for college instructors to understand their own level of culturally competency and guide future teachers through their often confusing and emotional encounters as they grow cross-culturally (Cushner, McClelland, & Safford, 2006). Many experts concur that helping adult learners prepare for their careers involves increasing their cultural competency skills, as well as, helping them develop their social-cultural consciousness around identify and privilege (Allen, 2002; Banks, 2001; Bigelow, Harvey, Karp & Miller, 2001; Cochran-Smith, 2004; Grant & Gomez, 2000; Haberman, 1994; & Nieto, 1996). Garcia and Guerra (2004) outlined why influencing pre-service teachers early is essential to the goal of developing commitment to educational equity and even social justice through teacher's cultural competency development. Individuals need to understand systemic factors that perpetuate deficit thinking and often reproduce educational inequities for students with diverse learning needs. Equally important is for teachers to hold a vision of the components of a truly inclusive academic environment that reflects strategies for diverse learners (Cushner et al., 2006).

A review of the research revealed few studies that included the long-term outcomes of multicultural education (Loeb, 2003) or a focus on non-traditional adult student learners. We found that most studies focused on pre-service teachers' responses immediately following the course or more often the examination of one element of a multicultural course (e.g. the field experience). Few studies considered teacher educators' influence beyond graduation (Sleeter & McLaren, 1995a). Therefore, it seemed important to the growth of the field to seek and report the voices of non-traditional adult learners reflecting on the effectiveness of the multicultural education course's usefulness for working with diverse learners after they have become classroom teachers.

## The Research Project and Data Reporting

As we designed and redesigned our Master of Arts in Teaching (MAT) program course content over the years, we each hoped that our courses prepared our pre-service teachers well and made a difference in addressing the needs we knew diverse learners brought with them to the classroom. As we continued to discuss our outlook for our courses, we also discussed our concerns for our pre-service teachers. In essence, we knew that we wanted to know whether in fact we were making a difference and having an impact. Out of such discussions grew the design for this project. We wanted to collect data from our MAT graduates; therefore, we sought answers to key questions. We wanted answers that could help improve the strategies we brought to our courses and ultimately increase pre-service teachers' cultural competency. We ultimately wanted to assist our students in ways that would help them, once they had their own classrooms. We wanted to prepare our pre-service teachers for the broad array of learning styles that students with diverse needs bring to the learning environment. We also believed that the results of this research would add to the knowledge in the fields of multicultural education and educational pedagogy.

The survey, consisting of twenty-five Likert-scale items plus fifteen open-ended questions, was sent to 200 former students. Forty (20%) former students responded to our electronic survey; and fifteen agreed to be part of our focus groups. The graduate assistant conducted two focus groups, with ten former MAT graduate students. Conflicts in scheduling the focus groups influenced the final number of MAT graduates able to participate. The research assistant collected and coded the data from the surveys and the focus groups. Confidential codes were assigned to the survey respondent's data, as well as the focus group participants. Although the ten focus group students also took the survey, because the surveys were anonymous, participants received different numbers from each instrument. The coded data appear in this writing in the following manner: researchers, research participant assigned number, data collection year, and the page number where the comments from either the surveys or the focus groups are located in the data, for example (Lonnquist, RB-Banks, & Huber, St. #, 2005, p. #). After coding, collecting and transcribing the data, a matrix was designed to capture common themes, and relevant comments. Outlier comments were few, but we purposefully sought to include them in the research as learning opportunities.

Three main limitations surfaced from the study. The limitations of the study are tied to the fact that multiple instructors teach the required course, research participants' prior knowledge, and the number of participants in the study. Three other faculty members, besides the two authors, taught the multicultural education course, and elements of cultural competency were addressed in other pre-service courses. Therefore, some participants indicated that it was a challenge to remember which cultural component or idea was learned in which course or with which instructor. Some of the noted outliers' comments also reflected a degree of frustration with

the number of instructors assigned to teach the course. Some questioned the consistency of course content. Due to the variety of students' backgrounds and majors, prior knowledge appeared to present some limitations to the research project. A broader sampling for the students who actually completed the required course would have provided more congruency for the comparison of data collected from the surveys and the two focus groups. In spite of the limitations, the voices of non-traditional adult learners reflecting on the effectiveness of the multicultural education course's usefulness after they have had some classroom experience make the results of this study worth reporting.

The research participants in this study brought with them their own unique characteristics that offer worthwhile insights for higher education beyond the traditional undergraduates with their less expanded cultural and learning styles perspectives (McIntyre, Byrd, & Foxx, 1996). Students enrolled in the MAT program ranged in age from 22 to 60—with a median age of 30. The MAT program participants returned to college primarily to obtain a Master's degree, with an emphasis in the field of teaching. The motivation behind earning a teaching license varied for the MAT participants. The demographics revealed that more than half the MAT participants decided to become teachers because they sought a change to a more meaningful career. Others reported they discovered they loved teaching after positive volunteer experiences in their children's school. Another important and unique demographic note connected to this project's participants is the fact that many of the Euro-American (White) graduate students indicated that they lived in urban areas, some even identified with living in the inner city, and almost all expressed having traveled internationally. Although about one half of the research participants from our classes live predominantly mono-cultural lives, many are in interracial marriages, have children adopted from another country and are intentionally involved in their children's birth culture, have chosen to live in integrated parts of the city, and/or are new immigrants to this country. Some students reported attending schools with learners with disabilities, in fact, one had taught, without a license, in a school for the deaf. As the data unfolded it was revealed that many had little in-depth exposure or formal experience with students with unique learning needs, in diverse settings or exposure to inclusive classrooms, in spite of their exposure to opportunities for such experiences. We viewed the assorted mix of the forty graduate students' backgrounds as a benefit to this research project and worth reporting.

### **Two Instructors: One Course and a Common Goal**

Both of us taught the same required graduate-level course over a period of five or more years in a pre-service Masters of Arts in Teaching (MAT) program designed for adult learners. We brought two unique and diverse perspectives to our courses; one an African-American female raised in the Southern tradition as well as the Baptist faith, with training in the field

of special education, the other a White Unitarian lesbian raised in the Midwest and Mexico, with training in social justice and teacher education. Through our discussions, we found that in spite of our differences we both hoped to achieve a common goal. Our goal was to improve the learning experience for K-12 students -- through the increased cultural competency awareness of teachers [National Center for Education Statistics (NCES), 2003]. We wanted to impart strategies on our pre-service teachers that would allow them to enter the classroom with competency and readiness for addressing the diverse needs of learners.

Our course designs were built on a common foundation, which stresses that students with diverse needs benefit from increased teacher competencies in understanding diverse cultural norms and needs (Gay, 2000). We wanted our pre-service teachers to develop the skills needed to work effectively with the broad spectrum of diverse learners and to create classroom climates rooted in educational equity. We attempted to avoid the "traditional transmission" style in the design of our courses, as well as the superficial cultural elements (Arias & Pointer, 2001) lamented by many teacher researchers (Delpit, 1996; Ladson-Billings, 2001; Zeichner, 1996). We knew that many MAT students, enrolled in this program, which focuses on urban learners, would take jobs in classrooms laden with students with identified and unidentified learning needs. We structured our courses' content to include materials with a specific focus on learners with diverse needs and to model pedagogy applicable to all learners. We targeted preparing pre-service teachers to instruct cross-culturally and that included attacking all imposed barriers for diverse learners. At each redesign of our courses for the Master of Arts in Teaching (MAT) program, we worked to provide opportunities for pre-service teachers that would allow them classroom and lab experiences that broaden their skills for working effectively with culturally diverse learners. With this background, we present the voices of our former students one to three years after they completed the required multicultural education course and are now practicing teachers.

### **Participants: Voices from the Research**

The results of the survey and focus group indicate that all the participants were in fact attempting to implement culturally responsive practices, some of which they learned in our courses, in order to work effectively with all students. Several participants praised the multicultural education course overall, as well as the discussion of cultural competencies throughout the program. In the voice of one participant it was stated, "Learned so much from it. It was one of the most valuable classes I had" (Lonnquist et al., St. 14, 2005, p.7). The course was essential because "Understanding the backgrounds and cultures of my students, which usually were very different from my own, is at the heart of everything I did to help my students succeed" (Lonnquist et al., St. 21, 2005, p. 6). When an outlier voice appeared, it was still regarded as informative as to what worked

based on a comment cited by one research participant, “No new knowledge was gained; only reinforced” (Lonnquist et al., St. 7, 2005, p. 7). Such comments can be useful when combined with others, such as, why the course is still needed, “I can say that my own racial identity and level of comfort with my students are the most important issues I address on a daily basis” (Lonnquist et al., St. 2, 2005, p.6). The enthusiasm reported by some teachers was gratifying, as found in this statement:

Now that I actually have students from diverse cultures that I see on a daily basis, it is even more exciting to me to learn about cultural diversity and imagine how I can apply that knowledge in my instruction and interactions with my students and their families. (Lonnquist et al., St. 33, 2005, p. 7)

Research respondents provided insight into what culturally responsive strategies they used since graduation. Several reported the following: (a) getting to know and value their own and others’ cultural heritages, (b) cultivating critical consciousness in their students, (c) incorporating multicultural information and resources, (d) using instructional strategies connected to different learning styles, (e) incorporating specific information/training about students with special needs, and (f) focusing on topics about equity and social justice. Common themes surfaced from the compiled data as these teachers shared their experiences about what worked or did not work regarding helping them develop cultural competency for the classroom. The main themes are summarized in Figure 1, and we begin by presenting the six key findings regarding the elements of our multicultural education courses that produced the greatest impact.

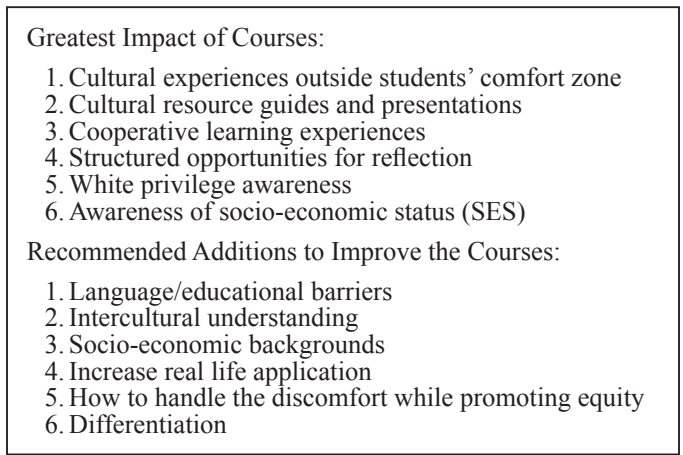


Figure 1. Developing Cultural Competency in Adult Pre-Service Teachers: Graduates’ Perspectives.

*Cultural Experiences Outside Students’ Comfort Zone*

One of the most frequently mentioned aspects of the course was the value of cultural experiences [in-school experiences, community visits, interviews and/or service learning], “As it is always best to leave my comfort zone and experience other cultures” (Lonnquist et al., St. 34, 2005, p. 5). “Actually

working with kids of other cultural groups is the most valuable. Just reading it in books--just felt like more jargon” (Lonnquist et al., St. 15, 2005, p. 6). Even students who felt the course was redundant for them expressed value in interviewing teens or exploring another part of the city. The literature supports their insight into the importance of providing cultural experiences for students, but it cautions that these experiences must be set up carefully to avoid stereotypes inadvertently being reinforced (Teel & Obidah, 2008). Two research participants expressed a desire for more instruction on ways to interact successfully with parents/guardians from diverse backgrounds and suggested speakers and role-playing as ways to help them to grow in cultural competency and working more effectively with learners with diverse needs. One suggested we invite “Hmong, Somali, Hispanic, African-American, Gay, Lesbian, Bisexual, and Transgendered (GLBT), white, etc. parents come in and talk to the classes about their hopes, fears, and expectation” (Lonnquist et al., St. 21, 2005, p. 7).

*Cultural Resource Guides and Presentations*

The majority of students reflected positively on how much they learned from exploring one culture in depth via the Cultural Resource Guide (CRG) and the presentation assignment. The CRG allowed small groups to create and present a 20-page resource guide for teachers focusing on a particular culture. Several teachers shared their resource guide designed in the MAT course with new teaching colleagues after graduation. In stressing how useful the guides were, one teacher told us “[I] reread my own guide a few times to ‘reactivate prior knowledge’ to help me with teaching” (Lonnquist et al., St. 2, 2005, p. 5). In addition, the guides were practical and another participant said of the Cultural Resource Guides “Allowed me to discover multicultural books and materials to use in my classroom” (Lonnquist et al., St. 17, 2005, p. 5).

*Cooperative Learning Experience*

For several students engaging in the required cooperative group, in order to create the cultural resource guides and presentations, was a positive way to learn this effective multicultural method (i.e. cooperative learning groups). The cooperative learning experience simultaneously allowed the pre-teachers to learn the multicultural information on a broader level. A few appreciated those instructors who taught and tried to ensure that the five elements of cooperative learning were implemented (social skills taught, face-to-face interaction, individuals held accountable, groups held accountable for the success of all, and groups allowing time to process often). This was gratifying because as instructors we remembered a fair number of complaints and some outright resistance to this learning strategy and modeling during the course.

### *Structured Opportunities for Reflection*

Several survey respondents noted that structured individual reflections offered a deeper examination of racism, white privilege, and one's own bias. The focus groups revealed that the required number of written reflections varied by instructors. The range for written reflections varied from three to twenty-four during a course session. One focus group discussion revealed how students delighted in journal reflections during the course. This raised the thought for how we, as instructors, could share students' reflections with the entire class in ways that broaden their perspectives even further. However, as we thought further, we wondered if students would be as forthcoming in their reflective writings if their peers had access to their deepest thoughts.

### *White Privilege Awareness*

Although some students made it clear that that they had learned about white privilege and power prior to this class and others indicated it was not addressed in their section of the course, for many this was a paradigm-changing concept and useful to learn in the context of schools. "The examination of white privilege was POWERFUL!" (Lonnquist et al., St. 14, 2005, p. 6). "The section on white privilege gave me the language and tools needed to address the issue with other teachers, parents, administrators, friends and family" (Lonnquist et al., St. 13, 2005, p. 6), the same teacher explained, "Being able to respond to challenges with research validates the strategies for many instructors and administrators" (Lonnquist et al., St. 13, 2005, p. 6).

### *Awareness of Socio-Economic Status*

A few students mentioned an increased awareness of the impact of Socio-Economic Status (SES) as a significant topic for understanding diverse learners' experiences. Through this course, one teacher "Came to understand poverty better and how it affects the whole life and culture of many students" (Lonnquist et al., St. 32, 2005, p. 6). Another participant reported that the course had "Completely changed my misconceptions of all economic classes" (Lonnquist et al., St. 15, 2005, p. 6), and stressed that SES readings should be required for all learners. However, it seems that after teaching for a few years, former students are keenly aware of how much poverty influences their students and think the course should place even greater emphasis on SES.

### **Recommended Additions to Improve the Courses' Impact**

Former students offered recommendations about what would be helpful for improving the course content and helping future teachers become more culturally competent (see Figure 1). A summary of the participants' key suggestions are divided

into six categories: (a) language/educational barriers, (b) intercultural understanding, (c) socio-economic backgrounds, (d) real-life application, (e) how to promote equity for students with unique learning needs and, (f) differentiation needs.

### *Language/Educational Barrier*

Several mainstream teachers found themselves in classrooms with a significant number of new English Language Learners (ELL) and thus not able to read the English texts at the level they were expecting. There are "Special concerns that arise when a student is a refugee, whose schooling background has been spotty at best" (Lonnquist et al., St. 21, 2005, p. 6). These teachers suggested that the course include "More on meeting needs of ELL population" (Lonnquist et al., St. 10, 2005, p. 6, St. 1 and 7, 2005, p. 6). For example, one teacher reported that parents/guardians who have limited English, most of whom are not familiar with the U.S.A's education system, "Are hesitant to check things because of language or lack of understanding of what their students are studying" (Lonnquist et al., St. 29, 2005, p. 6). In order to provide students with this needed support, our courses could offer ideas, and one teacher reported using one strategy, such as; "Follow[s] the progress of ELL students using their assignment notebooks" (Lonnquist et al., St. 29, 2005, p. 6).

### *Intercultural Understanding*

Former students reported that they faced unexpected challenges as they intentionally encouraged the cross-cultural engagements their professors had suggested. They wanted to feel more prepared for the cultural conflicts, and one teacher suggested adding "More discussion of how to handle intercultural conflict between students" (Lonnquist et al., St. 27, 2005, p. 7). Another participant thought we should "Make the focus of the field experience learning effective communication with folks different from oneself in some significant way" (Lonnquist et al., St. 21, 2005, p. 7). A few participants proposed we invite an intercultural panel of parents, students, and community leaders to talk with pre-service about how to improve their intercultural communication skills. Another felt we needed to help students examine those times when, "What seems disrespectful to me is not disrespect but a cultural difference" (Lonnquist et al., St. 21, 2005, p. 7). In addition, "sexism" was an intercultural barrier identified by one teacher, "As all of my students come from a culture that is clearly more patriarchal than my own, maintaining my authority with male students while being respectful of their cultural perspective is sometimes challenging" (Lonnquist et al., St. 27, 2005, p. 6).

### *Socio-Economic Backgrounds*

Although included in the prior section, understanding of students' economic backgrounds merits mentioning here as well. Over half of our students mentioned that they would like



to gain more skills for working respectfully and successfully with students living in poverty. One teacher proposed that, “Teachers from low-income schools in the Twin Cities come to talk to classes and explain how they have to alter their lesson plans” (Lonnquist et al., St. 28, 2005, p. 7).

#### *Real-Life Application*

Several research participants asked for “More real-life application” (Lonnquist et al., St. 7, 2005, p. 6), or more assistance to “Learn how to apply it [multicultural principles] in the classroom, for example “Role playing a variety of hypothetical classroom scenarios” (Lonnquist et al., St. 8, 2005, p. 7). Some students appear to have left the course idealistic about what would be encountered in the classroom and that idealism is reflected in this comment, “Reality presented more obstacles, stereotypes, and ingrained practices than expected in a professional setting” (Lonnquist et al., St. 36, 2005, p. 7). The need for real life experiences is sometimes at risk as teacher preparation programs expand and offer courses on-line or in the summer. One participant was especially adamant about this need, stating, “Do not bother to offer the course during the summer” (Lonnquist et al., St. 28, 2005, p. 7) indicating that summer school field experiences do not reflect a true-to-life experience.

#### *How to Handle the Discomfort While Promoting Equity*

This topic elicited the strongest and most passionate statements from our participants. The comments indicated teachers’ requests for more in-class experiences that helped them become comfortable in discussing equity and social justice with a very diverse mix of students as well as with unenlightened colleagues. “I think there should have been more self-examination of prejudices and stereotypes and how to be more honest and comfortable in discussing diversity” (Lonnquist et al., St. 2, 2005, p. 7), posed one participant. Another student angrily stated that the projects were not “Worth a hill of beans when you have to [work] outside of your comfort zone” (Lonnquist et al., St. 28, 2005, p. 5). Few students felt they received enough training on how to work with individuals from different backgrounds without alienating them, especially when they were the only white person. As stated by one research participant, “I felt educated about the issues, but not how to function as an outsider” (Lonnquist et al., St. 23, 2005, p. 6). Most participants reported that their principals and colleagues were supportive of the ideals of diversity. However, as new teachers, when they encountered those not well-enough prepared to address the needs of students, they did not know how to engage in ways to help those teachers who did not understand the importance of supporting diverse learners.

#### *Differentiation*

A few students wished, “There had been a way to differentiate this class, a more challenging course offered at a higher level, for those of us with sociology or political science majors or significant background in social justice work” (Lonnquist et al., St. 35, 2005, p. 6). College instructors modeling, and being transparent about this kind of differentiation in instruction to pre-service teachers would allow future teachers to more easily apply the concepts to areas of remediation. This would also allow for the development of strategies for working with learners with very specific or unique academic needs (Viadero, 2004).

#### **The Significance of the Data**

With an increasing number of learners with diverse academic needs, with diverse learning styles from diverse cultures entering schools future teachers should arrive in the classroom culturally competent, or they will have little chance of successful, when attempting to delivering their subject matter content (Gollnick & Chinn, 2009). Results from this study are significant because nontraditional adult students’ perspectives are rarely echoed in the literature in this area. The literature is lacking, and does not reflect an abundance of practical recommendations from teachers once they have gain valuable experiences in the classroom. This study makes visible the MAT graduates’ perceptions about what was helpful from their multicultural education courses and reflects their ideas about what higher education could do to improve teacher preparation concerning cultural competency. Their comments and suggestions are especially valued because they are now in the classroom and offered relevant and specific feedback that can be applied immediately. The participants of this study add to the body of knowledge in the field of pre-service preparation.

#### **Conclusion**

As outlined by Causey, Thomas, and Armento (2000), we also believe in similar ways that it is difficult to influence long-held beliefs and attitudes in the space of one course. However, even though no single course, experience, or instructor can transform anyone, some experiences can jolt complacent behaviors and encourage cross-cultural engagements (Ladson-Billings, 2005). Our goal as instructors of this required multicultural graduate teacher education course was to influence our students in ways that would increase their levels of cultural competency. Our former students offered data on what was useful from our courses in addressing diverse learners’ needs, and made relevant suggestions for improving our courses. The offered insights can also benefit other higher education faculty that seeks to address cultural competence in their courses. The results of this research project are useful for program administrators, and support the

notion that to be truly effective and transformational, programs need to infuse and reinforce a variety of significant and challenging experiences with and about diversity and the needs of diverse learners. The experience should occur over several semesters as an induction to the field of education (Whisnant, Elliott, & Pynchon, 2005). Our former students provide clear suggestions that can help teachers arrive on the first day of class feeling culturally competent and armed with a plethora of skills to help them create a powerful and supportive learning experience for all learners. This feeling of cultural competency, we believe, will be especially beneficially to those students with diverse and/or unique learning needs. Finally, as teacher educators, the data from this project will help us as we continue improving our courses in ways that give future teachers all the tools they need to foster an even greater learning experience for the next generation of learners with diverse needs; which is the goal we set out to accomplish.

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# Teachers' Attitudes and Concerns Towards Integrating Students with Special Needs in Regular Classrooms: A United Arab Emirates Perspective

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## Abstract

*Teachers from schools across the United Arab Emirates were asked to complete two questionnaires. The first questionnaire sought data from the teachers on their experience, qualifications, classes taught and attitudes in relation to inclusion. Information was also sought on the advantages and disadvantages of inclusion, the most difficult classification of children with special needs to include into regular classes/schools, where the United Arab Emirates was, at present, in terms of the inclusion issue and where future directions for special education in the United Arab Emirates should be planned. The second questionnaire was the stages of concern questionnaire developed by Hall and Loucks (1979). The stages of concern questionnaire sought information on where a particular group was at in coming to terms with a new innovation. The stages of concern data also determine the range of strategies needed to assist the group in coming to terms with the innovation. Through their responses to the stages of concern questionnaire teachers were placed on a stage of concern ranging from stage 0 (awareness) through to stage 6 (refocusing). This ranking was based on the teachers' responses to the innovation of inclusion. Strategies to assist the teachers' progress through the stages of concern are discussed. Suggestions as to how these strategies can be incorporated in undergraduate special education courses and workshops for practicing teachers are also outlined.*

## Introduction

Educators worldwide have been developing inclusive programs for several decades. In recent months the Ministry of Education, various educational zones and a number of associations (United Arab Emirates Association of the Guardians of the Handicapped, Juvenile Association in Sharjah) in the United Arab Emirates have advocated the admission of children with special needs into regular schools the United Arab Emirates. While this is in keeping with a worldwide movement for inclusive education it brings with it many difficulties and concerns (Sharma, Forlin & Loreman, 2007). Research (Ward, 1987.; Bradshaw, 1994, 1997, Avramidis, Bayliss & Burden, 2000) has indicated the important role teachers play in this process. Of particular importance is the teacher's attitude towards inclusive classrooms.

According to Sharma, Forlin & Loreman, (2007) "past research indicates that if educators have negative attitudes then educational reforms such as inclusive education are unlikely to be successful" (p96).

The United Arab Emirates community has longed cared for, catered for and educated children and people with special needs in the family environment and thus unlike a number of other countries inclusive educational practices are not widespread (Bradshaw, Tennant & Lydiatt, 2006)

The encouragement of education systems to adopt inclusive schools requires a substantial shift in not only educational strategies and attitudes but also a shift in community attitudes in the United Arab Emirates.

The present study, while gathering data on teachers' experience, qualifications, gender and age, also examined teachers' concerns about the inclusion movement in the Emirates.

The purpose of the present study was not only to gather important data on issues involving the inclusion process but also to establish starting points for mandatory Special Education courses at the undergraduate level, topics for inclusion in teacher in service workshops and whether there was a need for the establishment of graduate programs in special education.

## Methods

### *Subjects*

The study surveyed data from 250 classroom teachers across the Emirates (both Arabic and English speakers) as to their views on inclusive education. All 250 teachers returned questionnaires although in some cases not all questions were answered. The establishment of percentages for each question were based on the completed responses to that individual question. All teachers taught in primary or secondary government and private schools. Ninety trainee teachers in three universities across the Emirates were also surveyed.

### *Procedure*

The Ministry of Education Office in each Emirate was asked to supply the names of ten schools in their zone to be involved in the study. Each school supplied the names of ten teachers to complete the two questionnaire study. The writer travelled to all schools and presented a detailed explanation as to the purpose

of the study. The writer returned two weeks later to collect the completed forms. Two hundred and fifty completed forms were gathered from teachers across schools in all seven Emirates. Ninety two completed forms were also collected from students undertaking teacher training courses.

### *Instruments*

Two questionnaires were used to gather data in the present study. The first questionnaire sought responses from the teachers' / trainee teachers' on their gender, experience, nationality, type of school currently teaching in, special education qualifications, experience teaching children with special needs and attitudes towards educating children with special needs. The questionnaire also asked respondents to comment on which group of children with special needs they felt were the most difficult to include (and why), what programs should be included in teacher training programs and teacher workshops as well as asking respondents to comment on special education in the Emirates at present and suggested plans for future directions.

The first questionnaire created by the writer was piloted in three schools in the Abu Dhabi Educational Zone. These schools were all used by the trainee teachers for in school practicum placements. Feedback was received from teachers and several questions were reworded for ease of understanding and completion.

The second questionnaire was developed by Hall and Loucks (1979) at the Centre for Teacher Education at the University of Texas (Austin). The thirty five item questionnaire was designed to determine what people undertaking new innovations are concerned about at various times during the innovation process. The respondents had to circle the response which best indicates their feelings at the present time. The responses were then formulated and the respondents were categorised into seven stages of concern. These stages of concern include awareness, informational, personal, management, consequence, collaboration and refocusing.

A high score on the "Awareness Stage" would indicate little concern about or involvement with the innovation being implemented. A high score on the "Informational Stage" would indicate a general awareness of the innovation and that the teacher is unworried about herself/himself in relation to the innovation. A high score on the personal stage would indicate the individual is uncertain about the demands of the innovation and her/his ability to meet the needs of the role in the innovation. A high score on the management stage would indicate the teacher is focused on the processes and tasks required of the innovation such as time required and management. A high score on the consequence stage would indicate that the teacher is concerned about the impact of the change on students they are working with, i.e. is it relevant for my students? A high score on the collaboration stage would indicate that the teacher is concerned about the coordination of the innovation and working with others in implementation. Finally a high score on the refocusing

stage would indicate that the teacher is concerned about more universal benefits of the innovation or even replacing it with a alternative. This questionnaire was chosen as it was originally designed for responses from educational professionals. It has been used many times over the past three decades and has been found consistently to be a very valid and useful instrument.

## **Results**

### *Questionnaire One*

Questions 1, 2, 3, 4, and 5 asked respondents to complete information on gender, years of teaching, nationality, type of school, and grade currently taught (Table 1).

The results indicated overwhelmingly that the gender of the teachers surveyed was female; the vast majority of teachers surveyed had over 4 years teaching experience with the largest group having over 11 years experience. Forty three per cent of teachers surveyed were nationals (born and trained in the Emirates) with another thirty per cent being expatriates from other Arab nations. Sixty per cent of the teachers surveyed taught in government schools while another thirty one percent taught in private schools. The grade currently taught by teachers surveyed was significantly more primary grades than preparatory grades. All grades from kindergarten one through to year twelve were represented.

Questions 6, 7, 8, and 9 sought information about the teacher's special education qualifications and experience working with students with special needs.

Question 6 asked respondents to indicate special education qualifications/training (Table 2). Sixty nine percent of the respondents had no special education qualifications. Fourteen percent had completed a course in special education. A small number of teachers had completed degrees in special education. Questions 7 and 8 asked the respondent if they had ever taught children with special needs (Table 3) and if so in what type of location (Table 4). A large number of teachers indicated that they had taught children with special needs. A majority of this teaching was done in a regular school either in a regular classroom or a special class at the regular school.

Question 9 asked the respondents if they have a special class or unit at their school (Table 5). Half the teachers surveyed had a special class/unit at the school they were presently teaching in.

Question 10 asked respondents to describe their views on educating children with special needs (Table 6). The most popular response was that it was a good opportunity to work with children with special needs (41%) Another significant response was that having children with special needs in the school was a great benefit to all children (36%). The least number of responses was for wanting to know more about children with special needs. Question 11 asked the respondents to indicate which area of children with special needs do they think are the most difficult to include in the regular classroom (Table 7). The teachers indicated that children with behaviour problems were the most difficult to

include in regular schools followed by students with intellectual disabilities. Children with physical disabilities and children with learning disabilities were seen as the least difficult to integrate. Question 12 asked the respondents to indicate which subject area dealing with the education of children with special needs should be included in teacher training courses and teachers' workshops (Table 8). Programming for children with special needs was indicated as the subject area teachers wanted included in teacher training courses. Children with behaviour disorders, gifted and talented children and an awareness of disabilities were also clearly indicated as topics to be included.

Question 13 asked teachers to respond to how they viewed special education in the United Arab Emirates at present (Table 9). Most teachers indicated that special education was nonexistent or at the developing stage. In contrast a number of teachers indicated that special education was at an advanced level.

Question 14 asked teachers to indicate important issues for special education in the United Arab Emirates (Table 10). Disability awareness and community attitudes were clearly indicated

#### *Discussion*

The teachers' responses to questionnaire one indicated a number of issues. Firstly the teachers surveyed were generally female, nationals, taught primary grades, were experienced in the classroom and worked for government schools. The teachers surveyed had little special education training even though most indicated they had taught children with special educational needs in their careers. The majority of this teaching was done in the regular class/school.

Most of the teachers surveyed indicated that having children with special needs in the class was a good opportunity to work with children with special needs. Despite this the teachers indicated that they did not want to learn more about children with special needs.

Children with behavioural problems and physical disabilities were seen as the most difficult students to integrate into the regular classroom.

Programming for students with special needs was seen as an important topic for further teacher training courses as was children with behavioural problems and gifted and talented students.

Most teachers surveyed indicated that special education was nonexistent or at the developing stage in the United Arab Emirates. The topics considered most important for the development of special education in the United Arab Emirates were programs focusing on disability awareness and community attitudes.

#### *Questionnaire Two (Stages of Concern)*

As mentioned previously teachers were asked to respond to the 35-item questionnaire constructed by Hall et al. (1979). The results of these responses were converted into percentiles using

Table 1

#### *Demographics for Questionnaire One*

Information	Percentage	Number
<b>Gender</b>		
Male	15%	-
Female	85%	-
<b>Teaching Experience</b>		
Less than 3 Years	14%	-
4 to 10 Years	37%	-
11 or More Years	49%	-
N/A	0%	-
<b>Nationality</b>		
Emirati	43%	-
Expatriate (Non-Arab Country)	27%	-
Expatriate (Arab Country)	30%	-
<b>Type of School Taught At</b>		
Government School	60%	-
Model School	8%	-
Private School	31%	-
N/A	1%	-
<b>Grade Level Currently Taught</b>		
KG	-	30
1	-	24
2	-	32
3	-	42
4	-	45
5	-	33
6	-	7
7	-	4
8	-	3
9	-	4
10	-	6
11	-	2
12	-	4

the Table supplied by the authors (Table 11). The percentiles were then graphed to see which stage of concern was the highest and which stage of concern was the lowest as indicated by teachers across the United Arab Emirates (Table 12).

The results of the stages of concern questionnaire indicated that the highest percentiles recorded by the teachers were for the first stage, awareness. The second highest response from teachers was for the second stage, the informational stage. The lowest stages indicated were for the consequence stage and the collaboration stage.

Table 2

*Special Education Qualifications/Trainings*

Qualification/Training	Percentage
Ph.D.	4%
Masters	0%
Bachelors	9%
Diploma	4%
Course	14%
No Qualifications	69%

Table 3

*Percentage from Questionnaire One that Have or Have Not Taught Children with Special Needs*

Taught Children with Special Needs	Percentage
Yes	63%
No	37%

Table 4

*Location of Classes Where Children with Special Needs were Taught*

Type of Location	Percentage
Regular Classroom	25%
Special Class at a Regular School	41%
Special School	1%
Other	1%
N/A	32%

Table 5

*Whether Respondents have a Special Education Class or Unit at Their Present School*

Answer	Percentage
Yes	50%
No	45%
N/A	5%

Table 6

*Respondents' View on Educating Children with Special Needs*

Response	Percentage
Great Benefit	36%
Good Opportunity	41%
Able to Assist	7%
Good Benefits	5%
Student will have Great Effect	2%
Know More about Special Needs	3%
N/A	6%

Table 7

*Respondents' Opinion of what Area of Children with Special Needs is Most Difficult to Include in the Regular Classroom*

Response	Percentage
Learning Disabled	12%
Intellectually Disabled	28%
Physically Disabled	13%
Behaviour Disordered	36%
N/A	7%

Table 8

*Respondents' Opinion on which Subject Area dealing with the Education of Children with Special Needs should be included in Teacher Training Courses and Teacher Workshops*

Response	Percentage
Awareness of Disabilities	12%
Programming	46%
Learning Disabilities	6%
Behaviour Disordered	11%
Physical Disabilities	1%
Gifted and Talented	0%
N/A	12%

Table 9

*Respondents' View on Special Education in the United Arab Emirates at Present*

Response	Percentage
Advanced	24%
Developing	32%
Satisfactory	6%
Non-Existing	30%
N/A	8%

Table 10

*Respondents' View on Important Issues for Special Education in the United Arab Emirates*

Response	Percentage
Teacher Training Courses	21%
Disability Awareness	37%
Community Attitudes	31%
Others	6%
N/A	5%

Table 11

*Questionnaire Two: Stages of Concern*

Ranking of Stages of Concern	Highest Concern	Lowest Concern
Awareness	67	1
Informational	16	2
Personal	3	1
Management	6	7
Consequence	0	44
Collaboration	1	18
Refocusing	3	11

*Discussion*

The results indicated that teachers scored highly on stage 0, Awareness. This indicates that teachers have little concern about the innovation, in this case, integration. According to the authors when interpreting a high score on stage 0 cautions is needed. The results could mean two things depending whether the teachers are actually involved in the innovation (inclusion) or not. The authors suggested that for teachers not involved in the inclusion of students with special needs, which is the overwhelming

number of teachers surveyed, "a high peak score on stage 0 reflects awareness of and concern about the innovation" (p. 31). The teachers surveyed also responded highly to stage 1 the informational stage. This would suggest that the teachers surveyed have intense concerns about the innovation (inclusion) and concerns over the details of the innovation.

The teachers surveyed scored lowest on stage 4 the consequence stage and stage 5 the collaboration stage. This would suggest that the teachers surveyed have "no concerns about the relationship of students to the innovation" (Hall, George and Rutherford, 1977, p. 54). The teachers surveyed indicated little concern about the consequences of the innovation on the students. A low score for stage 5 suggests little concern for getting ideas about the innovation from others

These four results suggest a number of things. Firstly the teachers surveyed have real concerns about the innovation (inclusion of children with special needs into the regular classroom). They are concerned about not knowing enough about the innovation. Everything appears fine so why change. Generally a high stage 0 would indicate little interest in change. This is supported by a high score on stage one which suggests the teachers indicated they do not want to do anything differently. Having low scores on stages 4 and 5 would suggest that because the teachers have little knowledge about the innovation they have little awareness, and hence little concerns about the complexities which could evolve from implementing the innovation.

Trainee teachers indicated more awareness of the innovation of inclusion. They scored highest in stage 1 which indicated a willingness to learn more about the innovation.

**Recommendations**

Most teachers surveyed had none or very little special education training. The training of teachers in special education is vitally important. Teachers cannot be expected to include children with special needs into regular schools without the appropriate training and support. This training should be at both the undergraduate level and the post graduate level (and also include also teacher in service workshops). Teachers were particularly interested in programming, behaviour strategies and intellectual disabilities. Children with behaviour disorders appear to be an issue of concern with teachers and there is a need for courses on behaviour problems to be included in undergraduate programs.

The results of the present study indicated that teachers have real concerns over the prospect of integrating children with special needs into regular classes. There is clear evidence that teachers need to have the issue of inclusion clarified for them. They need clear information about the change and to be shown how management and instructional strategies need to be varied from the present practise.

Undergraduate programs in special education need to focus on issues such as disability awareness, community attitudes, programming for children with special needs. In service

Table 12

*Which Stage of Concern was the Highest and which stage of Concern was the Lowest as indicated by Teachers across the United Arab Emirates*

Score Total	Five Item Raw Scale							Total Raw	
	Stage 0	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Score	Percentile
0	10	5	5	2	1	1	1		
	23	12	12	5	1	2	2	1-42	3
	29	16	14	7	1	3	3	43-55	6
	37	19	17	9	2	3	5	56-60	9
	46	23	21	11	2	4	6	61-66	12
	53	27	25	15	3	5	9	68-72	15
	60	30	28	18	3	7	11	73-74	18
	66	34	31	23	4	9	14	75-78	21
	72	37	35	27	5	10	17	79-80	24
	77	40	39	30	5	12	20	81-83	27
	81	43	41	34	7	14	22	84-86	30
	84	45	45	39	8	16	26	87-89	33
	86	48	48	43	9	19	30	90-92	36
	89	51	52	47	11	22	34	93-95	39
	91	54	55	52	13	25	38	96-98	42
	93	57	57	56	16	28	42	99-101	45
	94	60	59	60	19	31	47	102-104	48
	95	63	63	65	21	36	52	105-107	51
	96	66	67	69	24	40	57	108-110	54
	97	69	70	73	27	44	60	111-112	57
	98	72	72	77	30	48	65	113-114	60
	98	75	76	80	33	52	69	115-118	63
	99	80	78	83	38	55	73	119-122	66
	99	84	80	85	43	59	77	123-125	69
	99	88	83	88	48	64	81	126-127	71
	99	90	85	90	54	68	84	128-132	74
	99	91	87	92	59	72	87	133-136	77
	99	93	89	94	63	76	90	137-141	80
	99	95	91	95	66	80	92	142-144	83
	99	96	92	97	71	84	94	145-150	86
	99	97	94	97	76	88	96	151-156	89
	99	98	95	98	82	91	97	157-161	92
	99	99	96	98	86	93	98	162-173	95
	99	99	96	99	90	95	99	174-189	98
	99	99	97	99	92	97	99	191-245	99
	99	99	99	99	96	98	99		



programs for experienced teachers need to focus on the issues such as clarifying the innovation, generating possible solutions in adapting to the innovation and increasing interest in the innovation. This can be done by presenting clear information about the innovation and to give examples of best practise used elsewhere.

Some aspects in our world are of high priority. “Some appear to leap out at us demanding our attention “(Hall, 1976 p 4). Inclusive education and special education are such aspects. In the United Arab Emirates there is a need to give these issues the attention in they demand.

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# Teachers' and Mothers' Satisfaction with Resource Room Programs in Jordan

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## Abstract

*This paper reports the results of an investigation of satisfaction of 135 resource room teachers and 190 mothers of children served in resource room programs in Jordan. Information from teachers was gathered using questionnaires, semi-structured interviews, and classroom visits. Information from parents was gathered using a brief questionnaire. Teachers reported a moderate level of satisfaction with working conditions in resource rooms. They were most satisfied with their job as resource room teachers and relationships with colleagues. They were most dissatisfied with salary and fringe benefits and family involvement in educational programs. Mothers were highly satisfied with resource rooms. They were most satisfied with the improvement in the academic performance of their children in the resource room and least satisfied with the school's communication with them.*

## Introduction

Jordan has recently made progress in teaching students with special education needs in public schools (Al Khatib & Al Khatib, 2008; Al Jabery & Zumberg, 2008; Hadidi, 1998). The resource room has been the major service-delivery model used by the Ministry of Education (MOE) to help students with mild disabilities stay in public schools (McBride, 2007). Resource rooms serve children from grade two to grade six. These rooms seek to support student's learning in the regular classroom. They are not intended to be an alternative educational setting. A student is referred to a resource room only after the regular classroom teacher, parents, the resource room teacher, and the principal jointly agree that resource room placement is appropriate (Directorate of Special Education, 2008).

Students referred to the resource room are grouped into small groups each consisting of 4-6 students. The resource room teacher is expected to teach 3-4 groups a day. In some cases, students are assisted on individual basis (Directorate of Special Education, 2008). MOE has made reasonable efforts to recruit teachers who are better qualified. Universities in Jordan have been offering programs in special education for many years. In addition, MOE offers interested regular classroom teachers a one-year diploma program in learning disabilities (Directorate of Special Education, 2008).

MOE has not yet evaluated these resource rooms. However, some studies conducted by university faculty members and graduate students evaluated different aspects of resource room programs in Jordan lately. For example, both Al Ayed (2003) and Hadidi (2003) studied problems faced by resource room teachers in Jordan have been investigated. These researchers

found that most common problems were: working with parents, school regulations, school community, instructional resources, program delivery in the resource room, referral and diagnosis, and teachers' role.

Fraihat (2007) investigated teachers' and parents' satisfaction with services offered by resource rooms. One hundred twenty teachers and 190 parents participated in the study. Results showed that both teachers and parents were generally satisfied with services. Bairat (2005) also investigated parents' satisfaction with educational services offered to their children with learning disabilities in resource rooms. Parents were most satisfied with teacher skills and least satisfied with the progress made by their children.

This study was conducted to evaluate teachers' and mothers' perceptions of resource room programs in Jordan. The study attempted to answer the following two questions:

1. What is the level of teachers' satisfaction with the working conditions in resource rooms?
2. What is the level of mothers' satisfaction with programs offered to their children in resource rooms?

## Methods and Procedures

### *Participants*

An accessible sample of 135 resource room teachers from 12 out of 36 educational directorates in the Kingdom participated in this study. They represented 24% of the population (Al Khatib & Al Kahtib, 2008). Ninety seven percent had a special education degree (42% had a Bachelors, 10% had a Masters, 45% had a high diploma, and 3% had a non-special education

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degree). According to teaching experience, 30% had five years or less, 33% had 5-10 years, and 37% had more than 10 years. Seventy percent of participants were females and 30% were males. Teachers' age ranged from 22 to 48 years, their mean age being 28.5 years.

Also, an accessible sample of 190 mothers agreed to voluntarily participate in this study. Mothers' age ranged from 21 to 52 with a mean of 34.5. Fifty two percent of mothers held a university degree and 48% had high school diploma.

### *Data Collection Methods*

For the purposes of this study, a questionnaire containing 18 items (see Table 1) was developed and used to assess teacher satisfaction with working conditions in resource room programs. The questionnaire included items mentioned in previous local research (Al Ayed, 2003; Fraihat, 2007; Hadidi, 2003) and interviews held with both teachers and supervisors. The initial version of the questionnaire was modified based on a review by a panel of experienced supervisors and resource room teachers of the clarity and relevance of questionnaire items. Then, the questionnaire was administered to individual or small groups of teachers by two research assistants trained by the researchers. Participants' responses to the questionnaire ranged from 1 to 3. To create index levels for responses, absolute cut-off points were established as follows: 1.00-1.66 (low level of satisfaction), 1.67-2.33 (medium level of satisfaction), and 2.34-3.00 (high level of satisfaction).

Semi-structured interviews with ten teachers and visits to their classrooms were conducted to collect additional information about certain aspects of resource rooms. The purpose of classroom visits was to observe the physical setting, materials and aids available, student files, etc. Interpersonal interactions between the teacher and students could be observed in only three classrooms.

Mothers' satisfaction was measured by a brief questionnaire consisting of four items (see Table 2). Most copies of this questionnaire were distributed by the two research assistants or teachers to mothers at drop-off and pick-up times of their children to and from the schools. The remaining copies were sent home to mothers with their children after a phone call from teachers or principals. As with the teachers' questionnaire, mothers' responses also ranged from 1 to 3 and the same index levels were used.

## **Results**

### *Teachers' Satisfaction with Working Conditions in Resource Rooms*

One hundred thirty five Jordanian resource room teachers responded to an 18-item questionnaire addressing their satisfaction with the working conditions in resource rooms. Results are shown in Table 1. Teachers were moderately satisfied

with working conditions in resource rooms. They demonstrated a medium level of satisfaction on 12 out of 18 items, a low level of satisfaction on 4 items, and a high level of satisfaction on 2 items. They were most satisfied with their job as resource room teachers and relationships with colleagues. They were most dissatisfied with salary and fringe benefits, family involvement in educational programs, and opportunities for professional development.

Interviews with teachers and visits to their rooms revealed the following: (a) duties of resource room teachers are basically self-defined because there are no clear job descriptions; (b) decisions related to resource room placement, the process of instruction, and the time a child may stay in a resource room are unsystematic; (c) resource room teachers are generally doing very little in terms of curriculum adaptation or alternative testing methods; (d) in-service training of resource room teachers is seasonal and conducted in ways that are not expected to have real impact on teacher practices; and (e) resource rooms are equipped with few educational resources that are of limited educational value for students with special needs.

Resource room teachers reported that they were not offered opportunities to interact with their colleagues. In fact, the researchers felt a sense of isolation among these teachers. They suggested that awareness programs and special incentives have to be offered to principals in order to motivate them to become genuinely committed to practical support for resource rooms. Finally, there was an assumption held by teachers that their roles were confined to academic skills and that supporting students in resource rooms was their sole responsibility.

### *Mothers' Satisfaction with Resource Room Programs*

Table 2 shows mothers' responses to the 4 questionnaire items. As can be seen in the table, mothers were generally satisfied with resource rooms. In particular, they were most satisfied with the improvement in the academic performance of their child in the resource room. They were least satisfied with the school's communication with them.

## **Discussion**

The results of this study shed light on how resource room teachers in Jordan function and what needs to be done to enable them to assist students learn more effectively. The results of the present study are consistent, to a large extent, with the findings of previous studies (Al Ayed, 2003; Hadidi, 2003). However, the present study adds much information to what has been available thus far.

The working conditions of resource room teachers need to be improved. The results revealed that resource room teachers were generally moderately satisfied with their work. Major sources of dissatisfaction among these teachers were: low salaries, lack of family involvement, unavailability of support staff, limited opportunities for professional development,

Table 1

*Teachers' Satisfaction with Working Conditions in Resource Rooms (n=135)*

No.	Item	Level of Satisfaction**						M*	SD
		3		2		1			
		f	%	f	%	f	%		
1	Salary and fringe benefits	2	1.5	58	43.0	75	55.6	1.35	.56
2	Opportunity for professional development	7	5.2	68	44.4	60	44.4	1.61	.59
3	School regulations related to adapting the curriculum to meet needs of students	17	12.6	70	51.9	48	35.6	1.77	.66
4	Time available to collaborate with regular classroom teachers	45	33.3	72	53.3	18	13.3	2.20	.66
5	Adequacy of student assessment	41	30.4	72	53.3	22	16.3	2.14	.67
6	Physical aspects of the work environment	36	1.96	57	42.2	42	31.1	1.96	.76
7	Support received from school principal	16	11.9	68	50.4	51	37.8	2.26	.66
8	Family involvement in educational programs	10	7.4	43	31.9	82	60.7	1.47	.63
9	Progress of students	31	23.0	90	66.7	14	10.4	2.13	.57
10	Amount of time available for planning what to teach and how to teach	56	41.5	66	48.9	13	9.6	2.32	.64
11	Amount of paperwork required	29	21.5	55	40.7	51	37.8	1.84	.76
12	Relationships with colleagues	69	50.4	52	38.5	15	11.1	2.39	.68
13	Teacher load	50	37.0	65	48.1	20	14.8	2.22	.69
14	Availability of technical support	9	6.7	48	35.6	78	57.8	1.49	.62
15	Quantity and quality of feedback from supervisors	20	14.8	74	54.8	41	30.4	1.84	.66
16	Availability of resources (e.g., supplies, textbooks)	30	22.2	56	41.5	49	36.3	1.86	.76
17	Satisfaction with work as a resource room teacher	85	63.7	38	28.1	11	8.1	2.56	.64
18	Being part of an educational team	66	48.9	45	33.3	24	17.8	2.31	.76

\*The higher the mean, the higher the level of satisfaction

\*\*3 (high satisfaction), 2 (medium satisfaction), and 1 (low satisfaction)

Table 2

*Mothers' Satisfaction with Resource Rooms (n=190)\**

No.	Item	Level of Satisfaction**						M*	SD
		3		2		1			
		f	%	f	%	f	%		
1	School's communication with parents regarding resource rooms	94	49.5	85	44.7	11	5.80	2.44	.60
2	Academic progress made by child in the resource room	147	77.4	36	18.9	7	3.70	2.74	.52
3	Social and emotional progress made by child in the resource room	130	68.4	53	27.9	7	3.70	2.65	.60
4	School's policies related to teaching in the resource room	93	48.9	89	46.8	8	4.20	2.45	.58

\*The higher the mean, the higher the level of satisfaction

\*\*3 (high satisfaction), 2 (medium satisfaction), and 1 (low satisfaction)

inability to adapt curricula to meet the needs of students, amount of paperwork required, insufficient feedback from supervisors, and lack of technology and resources. Interviews also revealed that resource room teachers were working without clear job descriptions and were not offered opportunities for interaction with the school community. Thus, duties of resource room teachers need to be determined more clearly.

It was also evident that resource room teachers did not give adequate attention to tasks that may be influential in assuring that students get quality remedial education programs. Among these tasks are: adapting general curriculum units to meet the special needs of resource room students; collaborating with parents and other school staff in developing and implementing Individualized Education Plans (IEPs) or adapting lesson plans, instructional materials, teaching methods; assessment of students; and enriching students' experiences and teaching them functional life skills through community-base instruction. This supports the conclusion made above that students are getting only limited and partial services.

Mothers were generally satisfied with the programs offered by resource rooms to their children. In this regard, this result is consistent with the findings of Fraihat (2007) who reported that parents were satisfied with resource room services. However, the finding that mothers were most satisfied with the academic improvement of their children in the resource room is inconsistent with Bairat's (2005) finding that parents were least satisfied with the progress made by their children. Thus, further research is warranted. Since the mothers' questionnaire used in the present study was very brief, future studies should use more comprehensive questionnaires and various data collection tools.

The results of this investigation indicated that educational services offered by resource rooms are still of low quality despite the fact that resource room teachers are getting better academic preparation currently. Teacher education programs may need to rethink their approaches and must give practical skills adequate attention. Recruitment of experienced special education consultants to initiate drastic changes in design and delivery of resource room programs may also be needed.

While the results of this investigation are both informative and interesting, the data have limitations that should be noted. First, the data collected in this investigation are based solely on the resource room teachers' and mothers' perspectives. Self-report data are susceptible to social desirability bias (Holden, 1996). In addition, it would be helpful in future studies to

consider the perspective of others (e.g., regular classroom teachers, principals, students, and fathers) when collecting information about resource room programs. Second, the sample used in the present investigation was an accessible sample; therefore, generalizations may be limited (Gay, Mills, & Airasian, 2006). The results may or may not be representative of resource rooms in Jordan and caution should be used when making inferences about other resource rooms. In future research, it would be helpful to randomly select participants from various geographical areas in the country.

Finally, this study was concerned with overall evaluation of resource rooms. It did not attempt to analyze the role of demographic variables that may determine teachers' and parents' perceptions. It is suggested that future research explores the role of such variables.

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# Attitude of Teachers Toward the Inclusion of Children with Special Needs in the General Education Classroom: The Case of Teachers in Selected Schools in Nigeria

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## Abstract

*Attitudes about inclusion are extremely complex and vary from teacher to teacher and school to school. This article explores the attitudes of teachers about inclusion of children with special needs in their secondary schools in general education. This study adopted a descriptive survey research design, with 60 teachers as participants from selected secondary schools in Oyo state, Nigeria. Four hypotheses were postulated at the significant level of 0.05. The instrument used was a questionnaire, which included items on gender, marital status, professionalism, and teaching experience, and has a general co-efficient alpha of 0.83. A t-test method of analysis was the main statistical method used to test the 4 generated hypotheses. The findings revealed that the attitude of male teachers is 39.4, while that of female teacher is 43.3, thus, the t-test analysis shows that the calculated t-test is 2.107, which is greater than the critical t ( $t = 1.960$ ). This implies that female teachers have more positive attitude towards the inclusion of students with special needs than their male counterparts. Also, hypothesis two was rejected, while hypothesis three and four were accepted. Teachers should therefore be encouraged to attend seminars and conferences to improve their knowledge about ways of practicing and accepting inclusion for a better tomorrow for our children with special needs in Nigeria.*

## Introduction

Educational programs for students with disabilities have traditionally been built upon the assumption that a variety of service delivery options needs to be available. Special education law, for example, stipulates that students with disabilities should be placed in the Least Restrictive Environment (LRE). The notion of LRE assumes that there are alternatives along a continuum of restrictiveness, with residential institutions on one end of the continuum and regular classes on the other end (Hallahan & Kauffman, 1998).

The Individuals with Disabilities Education Act (IDEA) (1997) requires that a continuum of placement options be made available to meet the needs of students with disabilities. The law also requires that to the maximum extent appropriate, children with disabilities are educated with children who are not disabled, and that special classes, separate schooling, or removal of children with disabilities from the regular environment occur only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be attained satisfactorily.

The last three decades have witnessed an international debate particularly in developing countries like Nigeria on inclusive education, that is educating students with disabilities and non-disabled students in the same school and in the same

class. The debate emanated from voices supporting and those criticizing inclusive education. The voices of those supporting inclusive education, such as Stainback and Stainback (1991), assert that inclusive education is the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving equal educational opportunities for all. Critics, however, argued that inclusive schools will not adequately meet the needs of the disabled and that those children with disabilities will receive more attention and therapy in segregated schools rather than in inclusive schools. The researchers wondered if the critics put into consideration the problem of stigmatization on the part of students with disabilities, especially in some developing countries such as Nigeria where children with special needs are yet to be fully accepted into society. This, therefore, calls for the reason(s) why the researchers are concerned about the attitude of teachers towards the inclusion of children with special needs in the general education curriculum.

The debate notwithstanding, the policy of inclusion has come to stay because of its natural tendency to eliminate discrimination and provide equal educational opportunities for all learners. Many countries, both developed and developing, have adopted and included the policy of inclusion in their education policies. Nigeria for example, adopted the policy of inclusion in its National Policy on Education (1998, 2004). The

policy stipulates the integration of students with special needs into regular classrooms, and free education for exceptional students at all levels. In practice, however, it is only one state out of over thirty-six states that has actually started the implementation of the inclusive education at the primary school levels; other states of the federation of Nigeria are just starting up by creating a unit in each of the schools for their inclusive classrooms. Studies, however, assert that the inclusive schools lack adequate technological equipment and incentives needed to provide special needs education in Nigeria. But it should be noted that special education and inclusion are in dire need of and demand for special equipment, adequate and specially trained teachers, incentives for available specially trained teachers, and proper administration and supervision. All these are some of the challenges of the programme in Nigeria; thus, the researchers are interested in investigating what will be the attitude of the teachers in the education of the special needs children in general education.

The decade between 1970-'80 could be rightly described as the golden period for the children with special needs in Nigeria. It was in the later half of the decade that the Federal Military Government of Nigeria released the National Policy on Education in 1977, thereby creating issues relating to inclusive education and equality to be elaborated upon, especially as it concerns the right to education of both the children with special needs and non-disabled children.

Prior to this period, the attitude of the society, government, and citizens on children with special needs has been highly negative and degrading, where the disabled were thought to be incapable of contributing anything meaningful to the society. One of the qualities of a teacher is positive attitude towards him/herself, the students and other activities which in turn influences his/her productivity.

The essence of this teacher's views of his/her class is embodied in his classification of the students in the class into two groups, those who "can really learn something" and, implicitly, "those who cannot." This particular judgment, though not objective, has been regularly repeated during the past and even present century by Nigerian teachers and administrators as a reason for denying education opportunities to these "uneducable," due perhaps to their negative attitude towards the exceptional children.

In another similar judgment, a student was denied access to a school because this individual was classified as "mentally retarded" and unable to be taught. The Nigerian teachers of that period deemed providing schooling for this particular group of people a complete waste of time, simply because the disability made it impossible for children with special needs to fit into the standard system and learn with only the methods and supports offered to the "normal" children. Thus, a great amount of similar judgments by teachers have negatively influenced the education of students with special needs, hence, creating a problem in their academics.

A study was carried out by Mba (1991) on the attitude of teachers towards the inclusion of students who are hard-of-hearing in general education classrooms. The findings revealed that the attitude of teachers indicated hesitancy of the teachers to accept the hard-of-hearing unless the communication barrier was removed.

Similarly, Ogbue, (1995) reported an interview conducted in Lagos State on the issue of inclusion of children with special needs in general education classroom. The findings indicate that of the 200 regular primary school teachers interviewed, 60% of them rejected inclusion, while 35% of them would want inclusion provided they are adequately trained; the remaining 5% were undecided on the issue. Thus, many of all these negative attitudes will definitely have an adverse effect on the education of children with special needs in Nigeria.

The aim of the study was to investigate the attitude of teachers towards the inclusion of students with special needs in general education classrooms, and the effects of variables such as gender, marital status, professionalism, and teaching experience on their attitudes. The present study had the form of a pilot study, which was the first stage of a large scale project with similar aims that was addressed to a representative sample across Nigeria.

## Method

This study adopted a survey research method. The method was chosen because it is a useful fact-finding tool for education (Kerlinger and Lee, 2000). More importantly, the manifestation of the independent variables had occurred prior to the research period. Thus, the researchers could not manipulate them. The study's participants were secondary school teachers who were selected using regional random sampling technique in order to cover the 6 geo-political zones of Nigeria. The survey uses a nationally representative probability sample that was selected using an extended form of the two-stage random-digit selection procedure described by Waskberg (1978). The survey employs a rotating panel design to gather data from approximately 60 teachers on a daily basis. Each daily sample consists of 10 new respondents. For six days, the study added structured validated questionnaires to the daily survey administered to the new national samples of the 60 respondents. The total sample for the 6-day period was 60 respondents.

The sample was composed of 60 teachers who worked in general education school (Regular Schools) in the area of Ibadan, Nigeria. In the study 71.6% of the samples were married, and 28.4% were single, while in terms of being a professional teacher, 81.6% of the participants are professional teachers, while 18.4% of them are not professionals. Considering teaching experience, participants with 1-9 years and 10 years and above were 50% respectively. The breakdown of the sample can be found in Table 1.

Table 1

*Demographic data (N = 60)*

Variable	Demographic Categories	N	%
Gender	Male	24	41.6%
	Female	35	58.4%
Marital status	Married	43	71.6%
	Single	17	28.4%
Professionalism	Professional Teachers	49	81.6%
	Non-Professional Teachers	11	18.4%
Teaching Experience	1-9 years	30	50%
	10 years and above	30	50%

The structured questionnaire used was a self reported questionnaire tagged 'Teachers' Attitude Towards Inclusive Education Scale'. The questionnaire consists of 20 items which were structured to elicit information on the attitudes of teachers towards inclusive education for children with special needs. The questionnaire was drawn in order to obtain data for the study. The items include (a) I would appreciate if special needs students are integrated into conventional classrooms, (b) I will be ready to care for those with special needs in my regular class, and (c) special needs students need the best I could give them like their counterparts in the regular classes. Using test-retest reliability method, the alpha coefficient of the test was 0.78.

*Instrument (Outcome Variables)*

Pilot interviews were carried out among a small group of Nigerian teachers to generate items for the scale in assessing the attitudes of teachers towards the inclusion of special needs children in general education classrooms. The final scale consisted of 20 items, which were accompanied by a four-point Likert-type self-report rating scale ranging from 1 to 4; 1 indicating a positive attitude to 4 indicating a negative attitude.

*Predictor Variables*

Teachers were asked to fill in a detailed biographical questionnaire with information on gender, marital status, professionalism, and teaching experience, all relating to their attitudes towards inclusion of the special needs children in the general education classrooms, which served as personal and job demographics.

Four null hypotheses were postulated at the significant level of 0.05; they include: (a) there is no significant difference between male and female teachers in their attitude towards the inclusion of special needs students in general education

classrooms, (b) there is no significant difference between married and single teachers in their attitude towards the inclusion of special needs students in general education classrooms, (c) there is no significant difference between professional qualified and non-professional qualified teachers in their attitude towards the inclusion of special needs and children in general education classrooms, and (d) there is no significant difference between teacher with less than 10 years of teaching experience and their counterparts with more than 10 years of teaching in their attitude towards the inclusion of special needs students in general education classrooms.

**Results***Null Hypothesis One*

The null hypothesis one states that "there is no significant difference between male and female teachers in their attitude towards the inclusion of special need students in general education classrooms." The results of the null hypothesis are presented in Table 2.

The results on Table 2 illustrate that the attitude of male teachers is 39.4, while that of female teachers is 43.3. The t-test analysis shows that the calculated t-test is 2.107, which is greater than the critical t ( $t = 1.960$ ) at a 0.05 significance level.

Since the calculated t (2.107) is greater than the critical t (1.960) it means that the mean difference between male and female teachers is significant. Since the mean score of female teachers is higher than that of their male counterparts, it follows that the female teachers have more positive attitude towards the inclusion of special need students than their male counterparts.

It also follows that the difference in the mean score is not by chance, but statistically significant. The null hypothesis one is therefore rejected. Hence, there is a significant difference between male and female teachers in their attitude towards the inclusion of special need students in general education.

Table 2

*T-test Comparison of Male and Female Teachers on Their Attitude towards the Inclusion of Students with Special Needs in General Education Classrooms*

Groups	N	M	SD	df	t	Sig.
Male	25	39.4	5.62	58	2.107*	0.05
Female	35	43.3	7.71			

\* Significant at the 0.05 level

*Null Hypothesis Two*

Null hypothesis two states that "there is no significant difference between married and single teacher in their attitude towards the inclusion of special need students in general education classroom." The results of null hypothesis two are presented on Table 3.



The results of Table 3 show the t-test analysis of the effect of marital status of teachers on their attitude towards the inclusion of students with special needs in general education classrooms. The results indicate that the calculated t is 2.460; when compared with the critical t (1.960) at a 0.05 significance level, it was observed that the calculated t is greater than the critical t. This result implies that the calculated t is statistically significant at the 0.05 significance level, thus there is a significant difference between married and single teachers in their attitude towards special need students.

A further look at the table indicates that the mean score of the single teacher (45.11) is higher than that of the married teacher (40.30), suggesting that teachers who are married have significantly more favourable attitude towards the inclusion of students with special needs when compared to the participants that are single. On the basis of this result, null hypothesis two is rejected.

Table 3

*T-test Comparison of Married and Single Teachers in Their Attitude towards the Inclusion of Students with Special Education in General Education Classrooms*

Groups	N	M	SD	df	t	Sig.
Married	43	40.30	6.52	58	2.460*	0.05
Single	17	45.11	7.58			

\* Significant at the 0.05 level

*Null Hypothesis Three*

Null hypothesis three states that “there is no significant difference between professional qualified and non-professional qualified teachers in their attitude towards the inclusion of special need students in general education classroom.” The results of hypothesis three are presented on Table 4.

Table 4 shows that the mean attitude score of professional qualified teachers is 41.57, while that of the non-professional teachers is 42.09. This means that the professionally qualified teachers tend to have a more favourable attitude towards the inclusion of special need students than their non-professional qualified teachers.

The t-test analysis shows that the difference between them is not significant at a 0.05 significance level, since the calculated t (0.217) is less than the critical t (1.960). The difference in the mean score therefore occurred by chance. Based on this, null hypothesis three is accepted. Hence, there is no significant difference between professionally trained and non-professionally trained teachers on their attitude towards the inclusion of special need students in general education classrooms.

Table 4

*T-test Comparison of Professional and Non-Professional Teachers in Their Attitude towards the Inclusion of Students with Special Needs in General Education Classrooms*

Groups	N	M	SD	df	t	Sig.
Professional	49	41.57	7.11	58	0.217,ns	0.05
Non-professional	35	43.3	7.71			

ns = not significant at the 0.05 level

*Null Hypothesis Four*

Null hypothesis four states that “there is no significant difference between teachers with less than 10-years of teaching experience and their counterparts with more than 10-years of teaching experience in their attitudes towards the inclusion of special needs students in general education classrooms.” The results of hypothesis four are presented on Table 5.

The result on Table 5 shows that the attitude of teachers with less than 10-years teaching experience is 42.76, while that of their counterparts with 10-years and above is 40.56. The t-test analysis shows that the calculated t is 1.202, which is less than the critical t (1.960) at a 0.05 significance level. Since the calculated t is less than the critical t, which indicates that the mean difference between the teachers in terms of teaching experience is not statistically significant, it follows that the mean difference occurred by chance. Therefore, the null hypothesis four is accepted, indicating that, there is no significant difference between teachers with less than 10-years teaching experience and their counterparts with 10-years teaching experience and above in their attitude towards the inclusion of students with special need in general education classrooms.

Table 5

*T-test Comparison of Teachers with less than 10-Years of Teaching Experience and Their Counterparts with more than 10-Years of Teaching Experience in Their Attitude towards the Inclusion of Students with Special Needs in the General Education Classrooms*

Groups	N	M	SD	df	t	Sig.
1-9 years	30	42.76	6.61	58	1.202, ns	0.05
10 years and above	35	43.3	7.71			

ns = not significant at the 0.05 level

**Discussion**

In agreement with the findings in this study, adequate literature search has indicated a negative attitude of teachers and much of this negativity results from lack of knowledge (Houck, 1992; Phillips, Allred, Brulle & Shank, 1990; Siegel, 1992). There is considerable research that suggests that classroom teachers feel inadequate when children with special needs are

included in a regular classroom (Monaham, Miller & Cronic, 1997). Although the reasons for this one contributing factor is the lack of training in special education, the significance of special education future teachers continues to grow along with teaching requirements beyond the traditional classroom. Thus, teachers are expected to integrate many programmes into the lives of the children they teach in order to accommodate the special needs children within the general education classrooms.

In addition, in a study carried out by Ivey and Reincke (2002) general education teachers showed a significant increase in their beliefs that there is resistance toward inclusion. This is in agreement with the finding in this study.

Also, there have been some studies (Berryman & Berryman, 1981; Jamieson, 1984; Wilczenski, 1994) which indicated the negative attitudes of general educators towards inclusion based on issues of experience on the job. These findings corroborate the recent outcome of this study. In the literature on the whole, the importance of individual variables is stressed, especially as it affects teachers of the children with special needs. Thus, future studies could examine teachers' personality traits, demographic characteristics, their ability to establish and maintain supportive social networks, and resilience as they mediate their attitude towards inclusive education.

### Conclusion

Inclusive education should be concerned with identifying all forms of exclusion and barriers to learning within national policies, cultures, educational institution and communities with a view to removing them. Also, it has implications for redirecting teachers' attitudes towards the inclusion of students with special needs in regular educational programmes positively. Thus, successful inclusion for children with special needs in regular classrooms entails the positive attitudes of teachers through a systematic programming within the classroom.

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# Planning and Implementing Policies for Special Education and Rehabilitation Services in Sub-Saharan Africa: Problems and Suggestions

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## Abstract

*Despite genuine efforts, countries in sub-Saharan Africa significantly lag behind sister nations of the world in providing basic education and more so in providing special education and rehabilitation services for students with disabilities. This work gives an overview of the magnitude of this problem and outlines some of its causes. In addition, the work suggests the passing and enforcing of relevant legislation, sound educational planning, and specific policies.*

To some extent, the literature covers special education and rehabilitation in Africa [Grol, 2000; Harsch, 2000; Kalabula, 2000; Kiyaga & Moores, 2003; Liganga, 2000; Miles & Kaplan, 2005; Ojile, 2000; United Nations Educational, Scientific and Cultural Organization (UNESCO), 2005A]. However, it needs be noted that Africa is a huge and diverse continent with fifty-four countries, including 15 least developed nations of the world. The continent occupies about twenty-percent of the earth's land area (Maryknoll Africa, 2009). Africa also has a population of about 861 million people, and 711 million live in sub-Saharan Africa (Patel, 2007).

It is estimated that, of Africa's population, 60 to 70 million are people with disabilities [United States Agency for International Development (USAID), 2007]. Thus, the aim of this work is to address problems and possibilities of planning and implementing special education and rehabilitation programs in Africa. Toward that end, it is noted that Africa's huge size, diversity, and prodigious number of people with disabilities make it difficult to achieve this goal effectively. The focus of this work therefore is narrowed to sub-Saharan Africa. As this region is also broad and diverse, the work provides examples from selected countries, including Ghana, Kenya, Liberia, Nigeria, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe. In looking at these and other Sub-Saharan countries, the work highlights the extent of the problem of providing special education and rehabilitation services in the region, outlines major causes of the problem, and suggests planning and policy approaches for improving services for people with disabilities (PWDs) in the region.

Sub-Saharan Africa itself consists of countries that lie partially or totally south of the arid Sahara desert or in the Sahel region, the area between the Sahara and tropical savanna. Of Africa's 54 countries, six are north of the Sahara and therefore form the United Nations (UN) region known as Northern Africa; these are: Algeria, Egypt, Libya, Morocco, Tunisia, Sudan, and Western Sahara, which is claimed by Morocco (North Africa, 2009).

In addressing disability issues in sub-Saharan Africa, it is necessary to point out that because of diverse cultures and religions in the region, beliefs about disabilities are extremely diverse, ranging from acceptance to rejection of people with disabilities (Kiyaga & Moores, 2003). While this is not sharply different from other parts of the world, especially in developing countries, this study realizes that countries of the region generally ascribe to the World Health Organization's International Classification of Functioning, Disability, and Health. This classification integrates two models of disability. The medical model regards disability as a problem caused by physical/physiological deficit or injury that needs to be cured or rehabilitated. On the other hand, the social model sees disability as a social construct, not an attribute of an individual; it therefore requires social change (Mitra, 2006). The merger of these perspectives implies that, in sub-Saharan Africa, while disability is viewed as a functional limitation caused by an impairment, its ultimate treatment lies in social changes that foster acceptance in society, access to education, housing, employment, and the like. Programs aimed at addressing disability issues in the region are to gravitate toward such ends.

## Magnitude of the Problem

The rights of Africa's children with disabilities to special education services have been affirmed in a variety of charters and international conventions; notable among these documents is the African Charter on the Rights and Welfare of the Child, adopted in 1990 and entered into force on November 29, 1999 (African Decade of Disabled Persons, 2009).

In addition to this Charter, declarations and agreements emanating from numerous international conventions affirm the importance of education as well as the rights of people with disabilities to basic education and rehabilitation services. Many African governments were signatories to these declarations and convention agreements (Harsch, 2000; King & Rose, 2005; Novicki, 1998; Watkins, 1999). In fact, in 2000, the World Education Forum met in Dakar, Senegal where the forum

declared that, “As a fundamental building block for development and peace in Africa, education must become available to all the continent’s people, especially girls” (Harsch, 2000, p1).

In spite of genuine efforts to adhere to international conventions and agreements, sub-Saharan Africa generally trails other parts of the world in the provision of basic education and even more so in the provision of special education and rehabilitation services. Hence, the British Department for International Development (DFID; 2000) maintains that, irrespective of international commitment to providing education for every child, youth and adult, children (in sub-Saharan Africa) continue to be marginalized from educational opportunities. This is particularly true of girls, children from economically poor backgrounds, children from nomadic and other minority ethnic families, and children affected by HIV/AIDS (Miles & Kaplan, 2005). Children with disabilities within any of these marginalized groups are marginalized even further.

Failure or inability to provide education for all as advocated by UNESCO (2005B) exacerbates the colossal education crisis in sub-Saharan Africa. For instance, Watkins (1999) points out that when we entered the new millennium, more than one-half of women and one-third of men in sub-Saharan Africa were illiterate and these numbers are rising. Furthermore, more than forty million primary school-age children in the region are out of school and this figure represents almost one-half of the total school-age population. Worse still, as the education infrastructure is generally in a dilapidated state, millions of school-age children drop out of school without gaining basic literacy skills. The region therefore has the developing world’s lowest rate of primary students’ transition from primary to secondary and tertiary education (Watkins, 1999).

The magnitude of Africa’s education problem is underscored further by the finding that Africa is the only developing region where the number of children who are not in school is increasing (Harsch, 2000; Watkins, 1999). If present trends continue, by the year 2015, 57 million children will be out of school in Africa, representing “12 percent of their global age group, but ... three-quarters of all children worldwide not in school” (Watkins, 1999, p.38).

Unfortunately, it seems likely that the low enrollment rate in Africa will continue. Already, the “UN System-wide Special Initiative on Africa has identified 15 countries with enrolment rates of less than 50 percent: Angola, Burkina Faso, Chad, Djibouti, Eritrea, Ethiopia, Guinea, Guinea-Bissau, Liberia, Mali, Mozambique, Niger, Rwanda, Senegal and Somalia” (Novicki, 1998, p.8). Enrollment of boys in these countries ranges from 23 to 49% while enrollment of girls ranges from 13-31% (Novicki, 1998).

Discriminatory and exclusionary policies and practices are not limited to girls alone; they significantly affect students with disabilities in Africa. However, it is difficult to approximate the number of children with disabilities in Africa, especially sub-Saharan Africa (Ojile, 2000). Nonetheless, USAID Africa (2007) finds that 60 to 70 million people in Africa are people with disabilities. This number is high in sub-Saharan Africa.

For example it is estimated that of the nearly 37 million people in Tanzania (Encyclopedia of the Nations, 2007), 3.5 million are people with disabilities while in Uganda, one in twenty-five people has a disability and 15% of such persons are deaf (USAID, 2007). It is found further that the number of people with disabilities in Africa includes ten to fifteen percent of school-age children (Grol, 2000; Kalabula, 2000).

As shown in a survey of views and perspectives of PWDs in Zimbabwe, students and adults with disabilities are marginalized in government policies (Choruma, 2007). Stated differently, serious consideration for full inclusion of school-age children with disabilities in Sub-Saharan Africa’s education system still is far from reality (Ojile, 2000). This is because national policies advocating education for all generally are not implemented realistically for students with disabilities. To cite only one example in Sub-Saharan Africa, in Zambia the government, acting in tandem with UN policies, has adopted a policy that everyone should be able to participate fully and equally in education and training irrespective of “place of residence, poverty, gender or disability” (Kalabula, 2000, p. 3). However, in actual practice, there are great imbalances in the provision of services and this is particularly true of children with disabilities (Kalabula, 2000).

Doubtless, imbalances in the provision of services are not unique to Zambia. UNESCO (2005A) finds that “In Africa, where poverty, hunger, disease, illiteracy, rural isolation and conflict are commonplace,” (p. 1) there is a high need for education systems to be inclusive and thereby provide educational services for all learners. Unfortunately, because of “insufficient and inadequate human, financial and material resources,” government policies do not emphasize the inclusion of students with disabilities and other marginalized groups in national educational plans (UNESCO, 2005A, p. 1). Similarly, USAID Africa (2007) finds that “The vast majority of Africans with disabilities are excluded from schools and opportunities to work, virtually guaranteeing that they will live out their lives as the poorest of the poor; school enrollment for the disabled is estimated at no more than 5-10 percent” (p. 2). This is consistent with the finding that majority of students with disabilities in sub-Saharan Africa do not receive education and training (Kalabula, 2000).

Miles and Kaplan (2005) also find that in Africa, children with disabilities may belong to any number of marginalized groups and “tend to be disproportionately represented in the out-of-school population” (p. 78). Thus, more than girls and other marginalized groups, children “with multiple impairments often experience greater marginalization from services” (Miles & Kaplan, 2005, p. 78).

### **Causes of the Problem**

There is no shortage of constraints and dilemmas hindering the provision of basic education for all in Sub-Saharan Africa. In a number of countries (e.g., Angola, Burundi, Liberia, Rwanda, Sierra Leone, and Somalia) protracted wars and political

insurrections ruined national economies and strangled achievement of goals in all government sectors (Bickler & Rode 2002; Harsch, 2000; USAID, 2007; Watkins, 1999). Each year, hundreds of thousand of children are disabled permanently because of these wars and subsequent poor trauma care (Bickler & Rode, 2002). For example, in 2000 there were eleven major wars in sub-Saharan Africa involving 20 percent of the sub-continent's population. It was estimated that between 120,000 and 200,000 child soldiers age five to sixteen years participated in these wars and majority of them sustained disabling injuries (Solarsh & Hofman, 2006). In Angola alone, as many as 100,000 "men, women, and children are landmine victims" while thousands of other Angolans are disabled because of other causes, some preventable (USAID, 2007, p. 2).

In addition to wars and insurrections, cultural factors, myths and misconceptions about disabilities, discrimination in education, disadvantages associated with rural dwelling, and communication problems are among the culprits of the education crisis in sub-Saharan Africa (Choruma, 2007; Grol, 2000; Liganga, 2000; UNESCO, 2005A; USAID, 2007). In some instances, a lack of political will is manifested in the absence of specific pieces of legislation unequivocally banning discrimination and, conversely, promoting equal education for all (Malakpa, 2005).

Overall, the single-most cause of Africa's education crisis is most likely under-funding of the education sector (Harsch, 2000; Novicki, 1999; Watkins, 1999). For instance, a study of twenty-nine sub-Saharan countries between 1980-1997 shows that the major indicators of entry into first grade and primary school enrollment rates include "government expenditure on education" and the percent of urban population (Mutangadura & Lamb, 2003, p.1). This problem (also true of other developing regions) is attributable to a variety of factors, including misplaced domestic priorities, increased military spending, corruption, and lack of political will (Kalabula, 2000; USAID, 2007; Watkins, 1999).

The other factors under-pinning the education crisis in sub-Saharan Africa includes external forces. For example, many governments experience decreases in aid packages on education while, conversely, there are mounting increases in the servicing of external debts. Mutangadura and Lamb (2003) show in a study of twenty-nine countries in sub-Saharan Africa that gross national product (GNP) "per capita and debt categories are significantly associated with primary enrolment rates, and with first grade entry rates when controlling for year" (p. 1). Similarly, King (2007) tracing the policy history of Kenya for more than forty years (1963-2006) finds a contrast between the national priority of establishing a connection between education and employment on one hand and on the other the priority of aid agencies regarding quality and poverty reduction. This is the essence of structural adjustment programs experienced in fourteen African countries (Watkins, 1999). Such programs force governments in sub-Saharan Africa to reduce the funding of education; such a forced policy has been referred to as privatization by default (Watkins, 1999).

These preceding causes of Africa's education crisis affect students with, and those without, disabilities. On the other hand, exclusionary and discriminatory policies and practices affecting students with disabilities are caused by additional factors. USAID Africa (2007) cites "social stigma associated with disability" as one factor that "results in marginalization and isolation, often leading to begging as the sole means of survival" (p. 2). Furthermore, it is argued that in sub-Saharan Africa, where formal special education and rehabilitation services are limited and still in developing stages, there is a lack of political will to provide such services (Choruma, 2007; Malakpa, 2005). This is because educators see such services as humanitarian and social welfare ventures that must wait until economically viable programs are in place. Put differently, educators are unwilling to expend funds on children whom they regard as unable to repay government and the country (Kalabula, 2000).

Provision of special education and rehabilitation services are impeded in sub-Saharan Africa by other factors. Kalabula (2000) pinpoints a number of these factors, including wide gaps between national inspectors and classroom teachers close to the problem, "lack of understanding of specific needs of individual children by administrators of education system at different levels of service delivery, negative attitudes of ordinary teachers, regular pupils, and other school staff toward the service and children with special educational needs, and lack of advocacy" (p. 7).

Adding to the foregoing, Ojile (2000) argues that inclusion of people with various disabilities has failed in Africa (especially sub-Saharan Africa) for a number of reasons. He cites some of these reasons as follows:

(a) High level of poverty due to poor economic showing of these African countries. As a result a small resource is available to assist these groups, (b) there exists high illiterate rate among the population. Few received education so the concern for handicapped education is relegated to the background, (c) massive corruption in the Government cycle and diversion of resources meant for the handicapped to other avenue through manipulation and lack of transparency, and (d) absence of reliable statistical data to know the official number of the disabled, their distribution, categories, severity and enrollment figures which makes planning and allocation of adequate resources extremely difficult (Sic). (p. 3)

For researchers and even service providers involved in special education and rehabilitation in Sub-Saharan Africa, a major problem is a dearth of methodologically sound research studies which ascertain the incidence and prevalence of disabling conditions in the region (Couper, 2002; Ojile, 2000). For instance, a two-phase research methodological approach has been validated as the best means of measuring prevalence of disabling conditions in developing countries. The first phase involves a survey of households within a drawn sample or a target population. In this phase, a questionnaire is used to ascertain which children are likely to have any disability (positive) and which are not (negative). In the second phase, children testing positive and a randomly selected ten percent

of those testing negative undergo medical and psychological screening to confirm the absence or if present, type, and degree of a disability (Solarsh & Hofman, 2006). Unfortunately, in a rigorous review of the literature, not a single study in sub-Saharan Africa on the prevalence of disabilities utilized this two-phase method (Solarsh & Hofman, 2006).

### **Addressing the Problem: A Few Suggestions**

While the problem of providing special education and rehabilitation services for people with disabilities in sub-Saharan Africa is huge and multifarious, there are encouraging signs of progress in the region. To cite a few, the governments of Zimbabwe, Botswana, Uganda, and South Africa have officially prohibited discrimination against people with disabilities. The constitution of Ghana commits the government to the promotion of the welfare of citizens with disabilities as well as the fostering of equal opportunity and social integration of such persons (Kiyaga & Moores, 2003). Likewise, the constitution of Uganda (among few in the world) recognizes a national sign language (Ugandan sign language) as an official language (Kiyaga & Moores, 2003). More than a decade ago, Togo, Burkina Faso, and Benin similarly recognized sign language in their constitutions (Michailakis, 1997). Furthermore, Gabon, Guinea, Kenya, Lesotho, Mali, Namibia, Niger, Rwanda, South Africa, and Uganda are among fifty countries of the world that have ratified The UN Convention on the Rights of Persons with Disabilities. This international convention requires ratifying nations to enact laws and adopt other measures to improve the rights of people with disabilities, including the abolishing of legislation, customs and practices that discriminate against them (United Nations, 2009).

While positive signs are encouraging, the truth remains that the problems of providing special education and rehabilitation services in Sub-Saharan Africa are extremely large and numerous. Addressing these problems in any country or group of countries in the region requires a multi-faceted and multi-sectorial approach that considers the unique socio-political, economic, and cultural realities of each entity. In light of this truism, a few general suggestions are offered for addressing these problems.

**Educational Planning:** In general, sub-Saharan African countries face a colossal crisis in providing basic and inclusive education for all. Affected most in this crisis are Africa's marginalized children, including rural dwellers, girls, and children with disabilities. Thus, the use of appropriate educational planning schemes is suggested as one means of addressing this problem. Toward that end, two crucial points are advanced. First, planning (and especially educational planning) is a technical process that considers various environments and stakeholders of a community before resorting to methods and strategies for a judicious and systematic allocation of human and material resources for the purpose of activating and/or accelerating human resource development through education.

Educational planning, however, is neither a magic wand that solves all educational problems nor is it the source of these problems (Coombs, 1970; Malakpa, 2009). It requires efficiency and adequate government support. Second, planning must be linked realistically to implementation. This point is crucial because experiences of educational planning experts amply show that "planning divorced from implementation contexts, or implementation unhinged from some form of planning, are often recipes for failure" (Kemmerer & Windham, 1997; Malakpa, 2009; Warwick, 1980, p. 379).

Specifically, it is essential that educational planning include programs for the education, rehabilitation, and integration of persons with disabilities (Carmola, 1997). This is emphasized because of the finding that educational plans in sub-Saharan Africa generally minimize or totally exclude the education of children with disabilities (Carmola, 1997; Choruma, 2007; Malakpa, 2009).

### **Policies**

Like anywhere else, it is important for policies and programs for students with disabilities in sub-Saharan Africa (e.g., Kenya, Liberia, Sierra Leone, South Africa, Tanzania, Uganda, and Zimbabwe) to be reasonable and realistic. Hence, efforts to adopt and/or revamp policies for education and rehabilitation of people with disabilities in the region invariably require clear, comprehensive, and far-reaching pieces of legislation. This emphasis rests on two observations. First, there is a long and impressive history of certain services for people with disabilities in sub-Saharan Africa. However, as illustrated by the education of the deaf in the region (Kiyaga & Moores, 2003), such services were provided by church and philanthropic organizations solely on the basis of humanitarianism. Secondly, in a number of countries in the region (e.g., Tanzania, Kenya, Zambia, and South Africa), there exist articulated policy reform documents and plans for the education and rehabilitation of persons with disabilities (Kalabula, 2000). However, in the absence of relevant pieces of legislation, there are no teeth to enforce such policies. Hence, there have been advocacies for binding legislation for special education and rehabilitation in sub-Saharan countries (Choruma, 2007; Malakpa, 2005; 2007). Malakpa (2007) also strongly supports sub-Saharan countries' ratification of the United Nations convention on the rights of Persons with Disabilities. This is because ratifying countries are obligated to eliminate barriers to inclusion and, conversely, maximize access of people with disabilities to education, health and housing services, employment, etc. (United Nations, 2009).

While the importance of legislation cannot be overemphasized, passage of such legislation for people with disabilities in sub-Saharan Africa often is impeded by more than the usual complexities and intricacies of parliamentary procedures. There are numerous myths and misconceptions about disabilities and PWDs in the region (Choruma, 2007;

USAID, 2007) and these are bound to affect legislative procedures. Furthermore, it is regrettable that passage of legislation for PWDs often is seen as an end in itself. When this happens, children and adults with disabilities and their families will have no true legally protected rights regarding education and rehabilitation. Hence, Malakpa (2007) accentuates both the passing and enforcing of disability legislation in war-torn countries such as Liberia and Sierra Leone which have thousands of war-related disabilities. Choruma (2007) emphasizes the same for Zimbabwe.

Like legislation, there is a dire need for adequate funding of special education and rehabilitation programs in sub-Saharan Africa. This emphasis rests on the obvious fact that without funds, there is little or no hope for implementation of plans and policies. Accordingly, it has been suggested that, given the tremendous pressure on public financing, private and civil sectors ought to play a leading role in funding special education and rehabilitation programs (Casely-Hayford & Lynch, 2003). However, extreme reliance on private financing of special education can trigger its own challenges. First, it requires government regulation. Second, it also forces governments to offer tax exemption and other forms of relief to participating individuals and institutions. Worse still, reliance on private financing is as risky as it is limited and uncertain. Thus, while private financing ought to be a welcome additional source, it need not be the sole basis for funding special education and rehabilitation services.

In addition to proper legislation and adequate financing, it is very important that special education and rehabilitation policies in sub-Saharan Africa emphasize massive public education. This emphasis ought to have three foci. First, the public needs information regarding the prevention of disabilities. Second, there is need not only to emphasize the rights of persons with disabilities to special education and rehabilitation but also to dispel myths and misconceptions associated with people with disabilities. Third, people with disabilities need public information regarding available programs and services. Such persons must be informed that they have rights to such services and their disabilities should not be impediments to education, rehabilitation, and social integration for such disabilities do not (and should not) relegate them to second class citizenship.

Governments in sub-Saharan Africa also need to consider policies for the preparation of special education teachers and rehabilitation specialists. Toward this end, it is suggested that some degree of special education be incorporated into the training of regular education teachers (Grol, 2000). Such a policy enables regular education teachers to participate confidently in inclusive education—a process by which students with disabilities are educated alongside their non-disabled counterparts. Additionally, given the high cost of training abroad, there is need to adopt policies for the preparation of teachers and trainers at local levels. In a number of countries (e.g., Botswana, Ghana, Nigeria, and South Africa), such policies and programs already exist for these purposes (Hartley,

Ojwang, Baguwemu & Ddamulira, 2004; Kalabula, 2000; Kiyaga & Moores, 2003; Solarsh & Hofman, 2006). These policies need to be developed further.

In both personnel preparation and instruction/training of individuals with disabilities, sub-Saharan Africa needs to focus on technology, moving gradually from low and affordable technology to higher levels. Efforts in this direction can be facilitated favorably by policies that ensure the acquisition and maintenance of assistive technology, and eliminate tariffs and import taxes on adaptive equipment (Casely-Hayford & Lynch, 2003). Certainly, this reduction on tariff will be far from a panacea but it will enhance the use of adaptive technology in the region.

Undoubtedly, the foregoing suggestions for providing and/or improving special education and rehabilitation are far from exhausting the list. The desire to effect quality special education and rehabilitation services yearns for policies regarding, inter alia, accessibility to educational institutions, programs, job training, and services, separate and inclusive education, access to buildings and commercial enterprises, political participation, and employment, be it competitive or self-employment. However, policies are meaningless if they are devised as an academic exercise. To be practical, meaningful, and rewarding, they must be realistic and consistent with local realities. Furthermore, it is important that policies are linked to effective programs that lead to societal integration and participation at all levels. Without a political will to exact such policies, people with disabilities in sub-Saharan Africa will continue to be marginalized and consequently forced into begging and other humiliating and dehumanizing situations.

### **Summary and Conclusion**

Through national policy statements, charters and international conventions, the importance of educating and rehabilitating people with disabilities in sub-Saharan Africa has been stressed. Yet, a major part of the huge education crisis in the region remains the minimal attention paid to the importance of educating, integrating and employing people with disabilities in the region. This lamentable oversight is attributable to a variety of causes but, ultimately, it is proposed that policies be adopted/revamped for special education and rehabilitation in sub-Saharan Africa. To this end, it is suggested that educational plans in the region include people with disabilities. It is suggested further that policies be adopted or revamped for the passage of legislation, increased funding, teacher training, and acquisition of assistive technology and other resources in the areas of special education and rehabilitation.

In conclusion, it is urgently impelling that governments in sub-Saharan Africa vigorously support the education, rehabilitation and employment of people with disabilities. Indeed, this is a matter of urgency given the development needs in sub-Saharan Africa, and in light of the huge number of people with various disabilities in the region. This urgency

also is based on the realization that education, rehabilitation, and societal integration of people with disabilities have benefits that transcend personal gratification to contribute to national socio-economic development. Hence, adoption of the African Charter on the Rights and Welfare of the Child and proclaiming the African Decade of Disabled Persons, 1999-2009, among others, are commendable steps in the right direction. To support these endeavors, governments in sub-Saharan Africa, non-governmental organizations, academic institutions, professional associations, and all concerned must redouble their efforts to make full inclusion a reality. This thrust should not be propelled by tokenism and mere humanitarianism but by a sincere conviction that inclusive education, rehabilitation, and societal inclusion of persons with disabilities lead to tangible and intangible benefits that accrue to individuals, communities, and socio-economic development goals of nations. Accordingly, in advocating education for all (including people with disabilities), UNESCO (2005B) poignantly emphasizes that improving the quality of education for all significantly impacts the earnings of individuals as well as economic growth and development, fertility and health.

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# Computer-Based Reading Programs: A Preliminary Investigation of Two Parent Implemented Programs with Students At-Risk for Reading Failure

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## Abstract

*In 2000, National Reading Panelists (NRP) reported that computer delivered reading instruction has potential for promoting the reading skills of students at-risk for reading failure. However, panelists also noted a scarcity of data present in the literature on the effects of computer-based reading instruction. This preliminary investigation examined the effects of two parent implemented computer-based reading programs on the reading skills of 25 students at-risk for reading failure/difficulties/disabilities in grades K, 1, & 2. Further, a questionnaire was administered with parents and students to elicit their perceptions of the effectiveness and desirability of the programs. The results indicate that computer-based programs are effective in increasing certain basic early literacy skills of students at-risk for reading failure. The results, implications, and limitations are discussed.*

The ability to read is essential to school-based learning and skilled responding in an information rich society. Academic and occupational success is limited for non-readers and low skilled readers (Lyon, 1997). Unfortunately, many students in today's schools do not become skilled readers. For example, in 1999, 40 percent of fourth grade students in the United States (U.S.) failed to master literacy levels required for school success, with the prevalence increasing to 70 percent among high-poverty schools (Hempenstall, 2004). The National Assessment of Education Progress (NAEP; 2005) report reveals that only 31 percent of the nation's fourth-grade students performed at or above proficiency levels, with 36 percent scoring at or below the basic level. NAEP results show small increases in performance of lower performing students' scores since 2000, though observed skill increases leave far too many students (i.e. 36%) reading below basic skill levels. These outcomes are troubling considering the instructional direction offered by the National Reading Panel (NRP) (2000) Report and mandates for improved performance in the No Child Left Behind (NCLB) Act of 2001, and the Individuals with Disabilities Education Improvement Act (IDEA) of 2004. NCLB requires all students to be proficient in reading by 2013 and IDEA legislation requires that students are exposed to evidenced-based instruction prior to their referral for special education eligibility evaluation.

A similar societal concern regarding the literacy skills exists across the globe. Approximately 16% of the world's population lack basic literacy skills [United National Educational, Scientific, and Cultural Organization (UNESCO), 2009].

Recent assessments indicate that less than 25% of students in sixth-grade have desirable reading levels in Botswana, South Africa, and Kenya; and less than 10% of the students have desirable reading levels in Lesotho, Mozambique, Namibia and Uganda (UNSECO, 2009). Similarly, it is reported that more than 50% of the third-grade students in the Dominican Republic, Ecuador, and Guatemala were reading at the lowest reading level (UNESCO).

Many reading researchers (Blachman, 1996, 1997; Felton, 1993; Fletcher & Lyon, 1998; Torgesen, 1997) agree that the vast majority of problems experienced by early readers can be prevented through early identification and introduction of high quality evidence-based instruction. Through appropriate, explicit, comprehensive, and intensive early instruction, reading failures experienced by two thirds of the current 20 million children can be prevented (Lyon, 2001). However, today's classroom teachers are faced with many challenges. For example, in some classrooms, the range of students' reading skills exceeds five grade levels (Simmons & Kame'enui, 1996). Additionally, many teachers are not adequately prepared to implement the evidenced-based instructional practices recommended by the NRP (Lyon & Chhabra, 2004). Thus, a gap exists between federal (NCLB and IDEA) mandates and the capacity of teachers to provide intensive evidenced-based interventions to students who struggle with reading.

One way to overcome some of the existing barriers in meeting students' needs is to supplement classroom instruction with parent implemented reading programs that provide

systematic, comprehensive, and explicit instruction in the five evidence-based reading components advocated by the NRP (Paculla & Ruedel, 2004). These components are (a) phonemic awareness, (b) phonics, (c) fluency, (d) vocabulary, and (e) comprehension. Previous research indicates that parents/families can have a positive influence on the children's reading abilities. Specific reading skills reportedly affected by parental involvement include print awareness, concepts and functions; knowledge of narrative structure; literacy as a source of enjoyment; and vocabulary and discourse patterns (Baker, Serpell, & Sonnenschein, 1995; Burns and Casberque, 1992; Clay, 1975; Dever, 2001; Jongsma, 2001; Jordan, Snow, & Porche, 2000; Snow & Tabors, 1996; Taylor, 1983; Taylor & Dorsey-Gaines, 1988).

However, parents may not have the skills to teach reading in an explicit and systematic manner, especially for facilitating reading skills of their children with reading difficulties. It is here that the computer-based reading programs, which are systematic and explicit in their instruction, hold great promise. For example, technologies such as computer-mediated text, text-to-speech, speech recognition, hypermedia and computer programs hold great promise for compensatory (i.e. providing access to text) (Edyburn, 2002a, 2002b, 2003) and remedial (i.e. improving students reading skills) (Rose & Dalton, 2002; Rose & Meyer, 2002) support for unskilled readers. Unfortunately, there is limited research on the effects of computer-based reading instruction and other technologies to develop reading skills [NRP, 2000; National Center for Technology Innovation (NCTI), 2004; Strangman & Dalton, 2005]. After extensive reviews of the literature, panelists from the NRP (2000), NCTI (2004), and Strangman and Dalton (2005) concluded that little is known empirically about the value of computer-based reading programs in strengthening struggling readers' reading skills, and much of the information that is available is "believed, felt, or hoped." Additionally, a concern was expressed (NCTI) that technologies were being adopted by practitioners before they were researched for their effectiveness. It is in this context the present investigation was undertaken.

The current study, a preliminary investigation, evaluated the effects of two explicit and systematic computer-based reading programs when implemented by parents of students at-risk for reading failure. This study is part of a series of studies being undertaken simultaneously in Utah and Ohio to examine the effects of two computer-based reading programs when implemented by parents during summer breaks and by school personnel during the academic school year. These studies are funded by a Steppingstones grant from the Office of Special Education Programs. The participants in each of the studies are independently selected and the intervention, procedures, and data collection measures are kept constant. The first study, a parental study conducted in Utah, is being reported here.

## **Purpose**

The primary research question of this preliminary investigation is (a) to examine the effects of parent implemented FUNNIX and Headsprout reading programs on the acquisition of early literacy skills of students (in grades K, 1 & 2) as measured by Dynamic Indicators of Basic Early Literacy Skills (DIBELS) measures. The secondary questions were to examine (a) parents' perceptions of the effectiveness, ease of implementation, and desirability of program they had implemented and (b) students' perceptions of the effectiveness and desirability of program they interacted with during the study.

## **Methods**

### *Participants*

Participants for the study were selected with the assistance of classroom teachers. Teachers working in grades K, 1, & 2 in five elementary schools were given research participation packets and were asked to send packets home with students scoring below the 15th percentile on a local, state or national test of reading achievement. A total of 240 packets were sent and 30 parents responded. Initial participants in this study included 29 parents and 30 students at-risk for reading failure. Two students came from the same family. The parents completed a demographic questionnaire that asked about (a) family demographics, (b) interventions or services being received by the child during the school year and during summer, (c) information about their home computer (i.e., operating system, availability of internet, etc.), and parents' ability to implement the program for eight weeks during summer break (questions included information about their travel plans, etc.).

After obtaining the consent form and the demographic questionnaire, we assigned the students to one of the two groups. We could not randomly assign the parent-child dyads in this study as Headsprout program required an internet connection to access the program lessons and not all parents had internet connections. Parents who had an internet connection were assigned to either the FUNNIX or Headsprout groups; however, parents who did not have internet connection were assigned to FUNNIX group only. We made sure that students from the same schools and parents with similar demographics were assigned to both groups.

### *Setting*

Participants in the study resided in urban and rural communities in Idaho and Utah. Students from both communities were assigned to both FUNNIX and Headsprout programs. At the beginning of the study, project personnel contacted parents and visited the homes of the participants to evaluate computer

systems to ensure that basic system requirements for FUNNIX and Headsprout programs were met. Parents in both groups implemented the computer-based programs at their homes and on their personal home computers during the summer break.

#### *Computer-Based Reading Program/Independent Variables*

Two computer-based reading programs were selected (i.e., FUNNIX and Headsprout) for this study. Criteria used to identify computer-based reading programs included: (a) program addressed instructional targets identified by the National Reading Panel Report (i.e. phonemic awareness, phonics, fluency, vocabulary and reading comprehension); (b) curriculum targeted in the programs was appropriate for kindergarten to second grade students; (c) the programs varied in their formats; (e.g., FUNNIX was an adult-mediated program requiring active adult involvement in navigating, monitoring, praising, etc. the entire time and Headsprout is a student-mediated program that only requires parental supervision), and (d) similar lengths of time to complete a computer-based lesson/episode (i.e., 25-30 minutes).

#### *FUNNIX*

FUNNIX is a CD-based Direct Instruction reading program to teach students to read and to strengthen early reading skills. It is an-adult mediated program and consists of two levels: FUNNIX Beginning Reading and FUNNIX 2. FUNNIX has an assessment/placement test to place students at different levels in the program. FUNNIX Beginning Reading consists of 120 lessons focusing on phonemic awareness, phonics, and fluency for students in KG, 1st, and 2nd grades. Beginning Reading materials include two lesson CDs, a parent training CD and guide, and consumable workbook. FUNNIX 2 contains two CDs and a reading book (see Stenhoff, & Jung, 2006).

Delivery of FUNNIX instruction requires an adult, using a computer mouse to operate the program. FUNNIX provides navigation tools in a visual within screen console to facilitate delivery of instruction. Buttons embedded in the console allow the adult to (a) pause instruction delivered by the narrator, (b) repeat instructions of the narrator, and (c) repeat entire exercises within a lesson if the student is making multiple errors. The FUNNIX parent training CD provides instructions for parents on the appropriate pronunciations (so that the parents can correct their child's mispronunciations), when to repeat exercises, how to navigate through lessons and exercises in a lesson, and how to praise students for the correct responses. FUNNIX has an in-built Direct Instruction curriculum and a narrator models the skills. The Program requires students/children to produce oral responses to stimuli presented on screen and complete workbook exercises. In addition, if students are placed in FUNNIX 2 they also read from a hardback reader that requires demonstration of previously learned skills.

#### *Headsprout*

Headsprout is a web-based supplemental reading program designed to teach students to read and strengthen their early reading skills. Headsprout is a predominantly student-mediated program and does not use a placement test [see Florida Center for Reading Research (FCRR), 2003]. Hence, all students start on episode/lesson 1. It is a money back guarantee program and requires all students to go through its entire curriculum. The program consists of 80 lessons/episodes focusing on phonics, and vocabulary, reading fluency and reading comprehension for students in kindergarten, 1st and 2nd grades. Headsprout delivers the majority of instruction without the assistance of an adult (that is the student navigates through the program after correctly answering the stimuli presented on the screen). The program directly teaches skills and requires students to demonstrate skill acquisition by manipulating and clicking the computer mouse on presented materials. In addition, students are prompted by the program to provide oral responses of letter sounds combinations and whole words. Headsprout recommends that parents attend to three tasks. First, listen for program provided prompts for student to produce oral responses and then ensure that student produces oral responses. Second, as prompted by the program, have student read aloud paper-based Sprout Stories and third, provide corrective feedback for reading errors produced when reading Sprout Stories. Further, Headsprout keeps a log of student's responses, login times, duration, and number of correct responses.

#### *Treatment Fidelity*

Each parent-child dyad was observed for at least two lessons during the study. This resulted in a total of 50 treatment fidelity observations during the eight week period. A treatment fidelity form with instructions was developed for each computer-based program. Project coordinators collected data using a treatment fidelity recording form. For FUNNIX, we observed parent implementation of the Program and recorded the number of opportunities and correct responses of the parents on the following components: Pausing the program after their child made an error, modeling correct responses, prompting their child to repeat incorrect sounds and words, doing entire exercises "over" if frequent errors occurred, and praising for correct responses during the lesson and workbook activities. For Headsprout, we observed the number of opportunities and correct responses of the parents on the following components: Modeling correct responses when their child mispronounced a word while reading or responding to stimuli on the computer, prompting their child to repeat incorrect sounds and words. Further, all parents kept a daily log of the time taken to complete the lesson/episode and the lesson/episode number that was completed. The parents also had a place on the daily log to comment on the motivation level of their child and technology problems encountered during the lesson/episode.

### *Dependent Measures*

#### *DIBELS*

Student's reading skills were measured using progress monitoring measures of the Dynamic Indicators of Basic Early Literacy Skills (DIBELS). DIBELS progress monitoring measures or probes help with documenting students' responsiveness to interventions and can be administered frequently. DIBELS consist of seven subtests: Initial Sound Fluency, Letter Naming Fluency, Word Use Fluency, Phoneme Segmentation Fluency, Nonsense Word Fluency, Retell Fluency, and Oral Reading Fluency. DIBELS measures were individually administered in one minute time intervals (Good, Simmons, & Kame'enui, 2001). Due to the one minute fluency component, DIBELS progress monitoring probes are sensitive to small changes in skill acquisition over brief periods of time. For purposes of this study, progress monitoring probe 19 (except for Letter Naming Fluency) was used as pretest and progress monitoring probe 20 was used as posttest. For Letter Naming Fluency, K-3 benchmark assessment was used as pre-test and 1-1 benchmark was used as post-test as progress monitoring probes are not available for this measure. Retell Fluency measure was not used in this study as many children were not even able to read the minimum words required for administering the RF measure (see Good & Kaminski, 2002)

#### *Social Validity Measures*

At the conclusion of the study, a social validity questionnaire was administered with parents and students to elicit their perceptions of the effectiveness, ease of use, and desirability of the computer-based programs. Parents were asked about their prior use of computer reading programs, previous experiences in delivering reading instruction, ease of program use, perceived effectiveness of the program, whether they would recommend the program to other parents, and their interest in using the program in the future. Students/children were asked about their general computer use, satisfaction with assigned computer-based reading program, their perception of specific program elements (e.g., stories, graphics, activities), and their perceived effectiveness of assigned program in teaching them how to read.

### **Procedures**

#### *Parent Training*

Before implementation of computer-based reading programs, project personnel met with parents at their homes to teach parents how to use the assigned program. Training consisted of (a) introducing parents to the objectives of the study, (b) reviewing participation requirements, (c) reviewing

the focus and structure of their assigned reading program, (d) reviewing program related materials, (e) discussing child and parental roles during instructional sessions, (f) reviewing and practicing procedures for properly correcting reading errors, (g) modeling overall use of programs, (h) monitoring parent use of programs, and (i) discussing weekly progress reporting procedures.

After the orientation and training meeting, parents were asked to deliver reading instruction five days a week, for eight weeks. Parents were provided with self-addressed envelopes and progress sheets and instructed to send daily log sheets (i.e., dates lessons/episodes were completed, amount of time per lesson and program related comments) to their coordinator after every fifth lesson or on a weekly basis. Parents were informed that their assigned project coordinator would contact them intermittently and were encouraged, if questions or problems arose, to contact their coordinator. Parents were told that their coordinator would observe a minimum of two sessions when they are implementing the program. The purpose of this observation was to (a) make sure that the parents were able to implement the FUNNIX program by providing corrections, praising, etc. and (b) parents of children assigned to Headsprout were monitoring their child's work and implementing the Sprout stories.

Finally, at the end of the initial home visit, DIBELS progress monitoring measures (pre-tests) were administered to the student in a quiet location. The entire session (training and pre-test) lasted approximately 1 ½ hours, with one hour for the overview and training of parent and approximately 20 minutes for the administration of DIBELS measures.

#### *Test Administrator Training*

Four project coordinators were trained using DIBELS materials and administered assessments with the second author until they demonstrated the probe administration skills specified in DIBELS training materials. During the course of the study, inter-observer agreement (IOA) data were collected on 20% of probe administrations and at least on one DIBELS pretest and one posttest for each coordinator.

#### *Treatment Fidelity*

Four project coordinators were also trained by the second author to collect treatment fidelity data. Training consisted of (a) a review of program required instructional delivery procedures, (b) correct use of the observation tool, and (c) scoring program implementation using video footage of students tutored using FUNNIX and Headsprout. Coordinators were required to demonstrate 95% IOA before their observations.

Further, the parents maintained a daily log of the lessons completed and time spent by their child interacting with the computer-based program. The parents also had a place on the daily logs to report any difficulty in accessing or navigating

the program and mailed the daily logs once every week in a self-addressed stamped envelopes given to them at the initial orientation session. Most of the parents mailed their forms and on a couple of occasions, the coordinators called the parents to remind them to mail their daily logs.

### *Post-Testing*

At the end of 8 weeks of implementation, the students were tested again at their homes using DIBELS measures. Further, the parents were asked to complete the social validity questionnaire independently and the students were asked the questions on the social validity forms by the project personnel. Students orally answered the questions, which were recorded on the form by the project personnel. At the end of the study, parents received a \$50 honorarium for their participation.

## **Results**

### *Participant Demographics*

Out of the 30 participants, five parent-child dyads either did not start or complete all 40 sessions/dropped out of the study. Of the 25 students who completed the study, 12 worked with the Headsprout program and 13 worked with the FUNNIX program. Of the 25 student participants, 16 were male and 9 were female. Seven of the students had just completed kindergarten, six completed 1st grade, and twelve completed 2nd grade. Eight students received special education services, ten received Title-1 services, three received other supplemental services, and four were reported by parents as receiving no special services. Ninety- six percent of the parents were female and their education ranged from high school to several possessing master's degrees. None of the students were receiving any additional reading interventions during the summer break.

### *Inter-Observer Agreement*

Inter-observer agreement (IOA) for the dependent measures was calculated using item by item agreement, with 94% overall agreement and agreement ranging from 85% to 98% across coordinators and across measures (pre and post). IOA was also collected on the treatment fidelity observations for each coordinator. IOA data for treatment fidelity were collected during one of two project coordinator's parent-child observations. IOA data for treatment fidelity averaged 92% and ranged from 75% to 100%.

### *Effectiveness of the Programs*

To evaluate the effects of the programs on the basic early reading skills of the students, two types of analysis were undertaken: First, a one-way analysis of co-variance was used

to compare the differences between the groups and second, paired-samples t tests were used to measure the pre-post gains on the DIBELS measures for each group. The one-way analysis of covariance was conducted using the computer-based program as the independent variable, posttests as the dependent variable, and pretests as the covariate. All null hypotheses were tested at the .05 significance level (two-tailed tests). A preliminary analysis evaluating the homogeneity-of-slopes assumption indicated that the relationship between the covariate and the dependent variable was not statistically significant as a function of the independent variable. However, the effect sizes (partial  $\eta^2$ ) for five of the six tests were between small to medium (Stevens, 1996). The partial  $\eta^2$  was small for Initial Sound Fluency, Phoneme Segmentation Fluency, and Oral Reading Fluency measures (.02) and moderate for Nonsense Word Fluency and Word Use Fluency (.13 and .10 respectively). The results of the one-way analysis of covariance for each of the six DIBELS sub-tests were not statistically significant at the .05 level. The adjusted marginal means were higher for the HS group on the Phoneme Segmentation Fluency and Initial Sound Fluency measures. The adjusted marginal means were higher for the FUNNIX group on the Letter Naming Fluency, Nonsense Word Fluency, Oral Reading Fluency, and Word Use Fluency measures (see Table 1).

### *Headsprout Group*

Paired-samples t tests were conducted to test if the mean difference between pre and post-test DIBELS scores was significantly different from zero. The results for the Headsprout group indicated that there was a statistically significant difference between pre and posttest scores on two of the six measures at the .05 significance level (two-tailed test). Posttest scores were higher on the Phoneme Segmentation Fluency measure and lower on the Letter Naming Fluency measure (see Table 2). The standardized effects size (standardized effects size index,  $d$ ) was large for both Phoneme Segmentation Fluency (.95) and Letter Naming Fluency measures (-.98) (Stevens, 1996). Effect sizes were also computed for remaining measures (those without statistical significance) and the standardized effects size index,  $d$  was small (.38) for the Word Use Fluency measure and negative for Nonsense Word Fluency and Oral Reading Fluency measures (-.32).

### *FUNNIX Group*

Results of the paired-samples t tests for the FUNNIX group indicated a statistically significant difference between pre and posttest scores on the Word Use Fluency measure at the .05 significance level (two-tailed test) (see Table 2). The  $d$  statistic for Word Use Fluency was .62 (medium). Effect sizes were also calculated for other DIBELS measures and the  $d$  statistic was small for Phoneme Segmentation Fluency (.36), Nonsense Word Fluency (.26) and Initial Sound Fluency (.20).

Table 1

*Means, Standard Deviation, and Adjusted Means on the Posttests for the Two Groups*

Posttest	Group	<i>n</i>	<i>M</i>	<i>SD</i>	Adjusted Means
Phoneme Segmentation Fluency	Headsprout	12	50.58	12.99	50.19
	FUNNIX	13	43.61	15.53	43.97
Initial Sound Fluency	Headsprout	12	39.20	19.56	36.42
	FUNNIX	13	32.06	15.61	34.63
Letter Naming Fluency	Headsprout	12	46.33	18.05	42.73
	FUNNIX	13	45.46	23.40	48.79
Nonsense Word Fluency	Headsprout	12	43.25	24.64	41.59
	FUNNIX	13	43.92	26.84	45.44
Oral Reading Fluency	Headsprout	12	33.66	23.41	30.94
	FUNNIX	13	32.38	24.79	34.90
Word Use Fluency	Headsprout	12	36.91	12.28	38.11
	FUNNIX	13	43.23	20.47	42.12

Table 2

*Percentage of Students with SEN by Disability and Educational Setting: A Comparison across 2001-02, 2003-04, and 2005-06*

Group	DIBELS Measure	Pre-Test		Post-Test	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Headsprout					
	Initial Sound Fluency	36.16	9.42	39.20	19.56
	Letter Naming Fluency	56.50	16.68	46.33	18.05
	Phoneme Segmentation Fluency	41.16	13.63	50.58	12.99
	Nonsense Word Fluency	43.91	25.59	43.25	24.64
	Oral Reading Fluency	38.58	27.14	33.66	23.41
	Word Use Fluency	32.33	16.19	36.91	12.28
FUNNIX					
	Initial Sound Fluency	30.16	15.88	32.06	15.61
	Letter Naming Fluency	48.46	24.73	45.46	23.40
	Phoneme Segmentation Fluency	40.23	13.54	43.61	15.53
	Nonsense Word Fluency	40.61	19.57	43.92	26.84
	Oral Reading Fluency	31.92	27.31	32.38	24.79
	Word Use Fluency	35.69	19.62	43.23	20.47

### Treatment Fidelity Observations

Parents were observed delivering FUNNIX program or when supervising their child interactions with the Headsprout program and during Sprout stories. Treatment fidelity was collected during the 50 home observations (two per parent-child). Observation targets for FUNNIX included pausing the program when errors occurred; addressing or calling attention to errors; modeling correct responses; prompting students to repeat modeled sounds and words; prompting students to do entire exercises “over” if frequent errors occurred; and finally, praise for correct responses during completion of the lesson and workbook. Observation targets for Headsprout included parents’ modeling the correct sound and words; prompting students to repeat the modeled sounds and words; and praise for correct responses. The data indicated that parents, for the most part, were able to correct their children’s errors, praise their child for correct responses, and provide appropriate responses. When their children produced errors, Headsprout parents modeled the word or sound 66.5% of opportunities and FUNNIX parents 70% of opportunities. With both groups, some parents were observed to correctly model responses 100% of opportunities available (see Table 3).

Table 3

#### Integrity of Parents Implementation of Computer-Based Reading Programs

	FUNNIX		Headsprout	
	M	Range	M	Range
Pause	88	17-100		
Model	70	0-100	66.5	0-100
Repeat	83	0-100	94	36-100
Over	89	0-100		
Praise – Lesson	1.67 <sup>a</sup>	.17-3.4 <sup>a</sup>	3.05 <sup>a</sup>	0-16.6 <sup>a</sup>
Praise – Workbook	1.47 <sup>a</sup>	.29-2.89 <sup>a</sup>		

Note. Percent of correct responses by the parent when a student commits errors.

<sup>a</sup> praise statements per minute

#### Parents’ Perceptions of the Programs

Approximately 20% of the parents (23% of the parents in the FUNNIX group and 17% in the Headsprout group) reported having previous experience with using a computer-based educational program. Further, 71% (69% of the parents in FUNNIX group and 75% in Headsprout group) indicated that they had previous experience with reading instruction. All the parents who participated in the study indicated that they were comfortable in using the program they were assigned (see Table 4). All but one parent in the FUNNIX group indicated that they would use the program to help another child and would

recommend the program to a friend (see Table 4). All parents in the Headsprout group indicated that they would use the program to help another child. All but one parent in the Headsprout group indicated that they would recommend the program to a friend (see Table 4).

Table 4

#### Parents’ Perceptions of Computer-based Reading Programs

Questions	FUNNIX %	Headsprout %
Did you have any previous experience with reading software before this study?	23	17
Did you have any previous experience helping others with reading instruction?	69	75
Were you comfortable using the program?	100	100
If you were to help another child with reading, would you use this program?	92	100
Would you recommend this program to a friend helping his/her child with reading?	92	92

#### Students’ Perceptions of the Programs

A majority of the students (84%) indicated that they play on the computer or use computer at home or school (it was 75% for the FUNNIX group and 100% for the Headsprout group). Sixty percent of the students (50% for the FUNNIX group and 73% for the Headsprout group) indicated that they may like computer-based reading programs. Sixty-two percent of the students in the FUNNIX group and 92% of the students in the Headsprout group (overall 76%) liked the program. More students in the Headsprout group (92%) indicated that they liked the program than the students in the FUNNIX group (62%). However, more students in the FUNNIX group indicated that they like the pictures (92% vs. 72% for the students in the Headsprout group), activities (92% vs. 83 of the students in the Headsprout group), and stories (77% vs. 50% of the students) in their program (see Table 5). When asked if the programs they used helped them learn to read better, 92% of the students in the Headsprout group and 85% of the students in the FUNNIX group indicated positively. Further, 62% of students in the FUNNIX and 58% of the students in the HS group thought that their friends would like the programs.

Table 5

*Students' Perceptions of Computer-based Reading Programs*

Questions	FUNNIX %	Headsprout %
Do you play on the computer at home or at school?	75	100
Do you like computer programs that teach reading?	50	73
Did you like the FUNNIX/Headsprout program?	62	92
Did you like the pictures in the FUNNIX/Headsprout program?	92	72
Did you like the activities in the FUNNIX/Headsprout program?	92	83
Did you like the stories in the FUNNIX/Headsprout program?	77	50
Do you think the FUNNIX/Headsprout program helped you learn to read better?	85	92
Do you think your friends would like the FUNNIX/Headsprout program?	62	58

**Discussion**

To summarize, this preliminary investigation examined the effects of two computer-based reading programs on the early literacy skills of students at-risk for reading failure. The results indicate that there were no statistically significant differences between the two groups on the DIBELS measures. However, when each group was analyzed for gains on the DIBELS measures, the students in the Headsprout group had large gains on the Phoneme Segmentation Fluency measure, small gains on the Word Use Fluency measure, and had negative gains on the Letter Naming Fluency, Oral Reading Fluency, and Nonsense Word Fluency measures. The students in the FUNNIX group had medium gains on the Word Use Fluency measure; small gains on the Phoneme Segmentation Fluency, Initial Sound Fluency, and Nonsense Word Fluency measures; and negative gains on the Letter Naming Fluency measure. Further, almost all the parents indicated on the social validity questionnaire that they (a) were comfortable using the programs, (b) would use it to help another child, and (c) would recommend the program to a friend.

A majority of the students (84%) in the study reported that they use computers regularly either at home and/or at school. More percentage of students in the Headsprout group indicated that they liked the reading program; however, more students in the FUNNIX group indicated that they liked the activities

and stories in the FUNNIX program. Ninety-two percent of the students in the Headsprout group and 85% of the students in the FUNNIX group indicated that the computer programs helped them learn to read. However, a lower number of students, only 62% of the students in the FUNNIX group and 58% of the students in the Headsprout group thought that their friends would like the reading programs they used.

*Effects of the Programs*

A significant finding of this study is that both programs facilitated gains on the phonemic awareness measure, a crucial component of the reading process, after eight weeks of intervention. Specifically, the DI-based FUNNIX group (a parent-mediated program) had small gains in the area of phonemic awareness (as measured by Initial Sound Fluency and Phoneme Segmentation Fluency measures) and the Headsprout group showed large gains (see effect sizes) on the Phoneme Segmentation Fluency measure. Further, the FUNNIX group had small gains in the area of phonics (as measured by Nonsense Word Fluency) and medium gains on the Word Use Fluency measure and the Headsprout group (a student-mediated program) showed small gains on the Word Use Fluency measure. These findings are consistent with previous findings reported in literature and the National Reading Panel conclusions on Direct Instruction (print) programs and previous literature on computer-based programs that targeted phonemic awareness skills.

It is interesting to note that the Headsprout group showed gains on only two of the measures and the FUNNIX group showed gains across a range of measures. Further, we had only one large effect size, i.e., on the Phoneme Segmentation Fluency measure for the Headsprout group, and one medium effect size, i.e., on the Word Use Fluency measure for the FUNNIX group. This could be due to many factors. For example, the computer-based interventions in the study consisted of at least five major components that could have differentially influenced the results. These include (a) explicit curriculum, (b) the ability of parents to systematically correct their child's errors and or provide feedback, (c) parental attention provided to the students, (d) the technology aspect of the curriculum, and (e) skills targeted by the lesson in the program. In this study, we attributed the results to a combination/interaction of the five above components. However, a particular aspect or a combination might have been more powerful predictors of the students' gains on some of the measures and was not examined in this study. Especially, given that all students in the Headsprout group start on lesson 1 and the students in the FUNNIX group are placed by their performance on the placement test, we hypothesize that the skills targeted by the program (to be more specific, the 40 episodes or lessons) could have been one significant factor for the differential results.



### *Lower Scores on Letter Naming Fluency Measure*

Students in both groups had lower scores on the Letter Naming Fluency measure. This result may be in part due to the differences in the pre and post probes administered to measure Letter Naming Fluency. Unlike other measures, for which progress monitoring measures were used, the Kindergarten Benchmark Assessment measure was used as the pretest and the first grade Benchmark Assessment measure was used as the posttest. Hence, lower scores could have resulted from the increased difficulty of the post-test probe.

### *Lower Scores on Oral Reading Fluency Measure*

Students in FUNNIX and Headsprout groups had lower scores on the Oral Reading Fluency measure. We hypothesized that this might be due to the fact that the students did not complete all the lessons in FUNNIX or episodes in Headsprout program. We decided on a minimum of eight weeks of intervention as most Tier 2 Response to Intervention (RTI) interventions are implemented for at least eight weeks (see Fuchs and Fuchs, 2005) and also due to time constraints. As most students in the program have reading difficulties and both programs target decoding skills in the first part of their program, the oral reading skills were not practiced and this could have resulted in lower scores on the Oral Reading Fluency measure.

### *Parental Implementation of the Programs*

In this study, we observed a range in parents' ability (during our observations) in modeling sounds, providing corrections, and feedback to their child's correct responses. A parents' ability to implement the program with fidelity is also dependent on the interaction of many factors. Some of these include (a) parental motivation and/or prior involvement with their children's academic work, (b) parents' prior experiences with teaching reading, (c) the requirements of the programs on the parents, and (d) the nature of the training (amount and also ongoing support). In this study, only parents who were interested in facilitating the reading skills of their child participated and a majority of them indicated that they had prior experiences with teaching reading. In spite of their motivation and experience, we were surprised with some low scores on the treatment fidelity forms. One way to overcome this issue is to provide more ongoing support to parents (based on their needs) rather than one training session at the beginning of the study.

### *Participants' Perceptions of the Programs*

All the students indicated that they liked the program they had used. Further, all the parents indicated that they were comfortable using the program. We asked different questions, in addition to direct questions, to elicit participants' opinions.

For example, we asked the parents if they would recommend the program to a friend and/or would they use it to help another child. The answers were consistent. Among students, similar percentage of students (62%) in the FUNNIX group indicated that they like the program and their friends may like the program too. However, 92% of the students in the Headsprout group indicated that they like the program but only 58% thought that their friends would like the program.

We were not surprised with the parental perceptions in that we think (a) parents who were interested participated in the study and (b) parents who did not like the programs may have dropped out of the study (five dropped out of the study). However, we were surprised with the students' perceptions (especially their perception of the program vs. if they perceive their friends would like it) for the Headsprout group. We think that it might have to do with the instructional level/skills targeted in the program. As the sample size is small (for Headsprout group it was 12 students), it is difficult to make any conclusions with any confidence.

### *Significant Contributions of the Study*

First, the study adds to the small literature base on computer-based reading programs and their effectiveness in promoting basic early literacy skills. Second, the use of treatment fidelity forms to measure the parent-child interactions is another significant contribution of the study that is rarely reported in the literature and especially in the literature on computer-based reading programs. Such measure might also be helpful in assessing parents' skills and for providing additional support to parents to improve the effectiveness of the programs. Third, the present study measured the perceptions of parents and students regarding desirability and effectiveness of the program. We strongly believe that collecting social validity data on the (a) effectiveness, (b) efficient/easy to use, and (c) desirableness is very important for the sustainability of program in practice. Information on the above components provides both practitioners and parents with a comprehensive picture of the programs and aids in their selection and use of programs.

### *Limitations of the Study*

There are some limitations to the study and the results should be interpreted as tentative due to these limitations. These limitations are (a) small sample size, (b) lack of control group, and (c) non-random assignment of the groups.

First, we tried to recruit as many parents as possible (sent 240 parental packets to parents of students at-risk for reading failure) and ended up with 25 participants (for the final analysis). As the sample size for the study was small (less than 20 students for each group), the power of the statistical tests in rejecting the null hypotheses may be weak. We tried to increase the power of the statistical test by testing the null hypothesis at

the .05 significance level (two-tailed test) in spite of conducting multiple tests. We tried to overcome the issue of limited power of the statistical tests by undertaking effect sizes. The effect sizes computed did indicate that the results of this preliminary investigation are promising.

Second, even though the effect sizes indicate the skill growth in phonemic awareness and word use fluency across both groups and on Nonsense Word Fluency and Initial Sound Fluency measures for the FUNNIX group, the lack of a control group makes it difficult to understand the relative significance of the results. Further, the presence of a control group also would have helped in our understanding of lower scores on Oral Reading Fluency measure (and on Nonsense Word Fluency and Initial Sound Fluency measures for the Headsprout group). For example, Cooper, Nye, Charlton, Lindsay, and Greathouse (1996) conducted a meta-analytic review of studies examining the effects of summer vacation on students' standardized achievement scores. The authors compared the students' spring test scores with that of the fall test scores and concluded, based on their meta-analysis, that the students' scores were lower by at least one month as measured by grade level equivalents. A control group would have provided data in understanding if the lower scores were due to summer learning loss (i.e., lack of opportunities to practice) or it was due to other issues (for example, motivation of the students at post-testing, etc.).

Third, we were not able to randomly assign (in a true fashion) the students due to some families lacking internet access. The lack of random assignment makes the current investigation a quasi-experimental one. We tried to make sure that students from all five elementary schools were assigned to both groups. Similarly, we collected information on family demographics to make sure parents with higher education were assigned to both the groups. We also collected daily logs to monitor that parents were implementing the lessons every day for 30 minutes for both groups. Further, we used pre-tests as covariate to control for initial differences of the students. However, due to the lack of random assignment, the results should be considered tentative.

#### *Further Research*

First, further research in the area should be conducted to replicate the tentative findings of the study. Such studies should include random assignment of participants and a larger sample. Future studies should also include a comprehension measure and maybe longer intervention sessions to evaluate the effects of the two computer programs.

Second, parents provided positive evaluations of the ease of implementation and effectiveness of both programs, and nearly all parents reported that they would use their assigned program again and would recommend it to other parents desiring to improve their child's reading skills. However, a majority of the parents in the study reported having previous experience

with reading instruction and this could have influenced their perceptions. Future studies are needed that examine the perception of parents with limited or no experiences with teaching reading.

Third, the majority of student participants reported that their assigned program strengthened their reading skills; and 62% of students using FUNNIX, and 92% of Headsprout students reported liking their assigned program. This outcome is puzzling considering that substantially more FUNNIX students reported liking the stories, activities and pictures in FUNNIX compared to Headsprout students. The students in the FUNNIX group might have encountered more demanding lessons, and or, had parents with them all the time that could have influenced their perception of the overall program. Future research is needed to examine factors influencing students' perceptions.

Further, this study was conducted in the U.S. and with English language speakers. Many developing countries may have limited access to technology and English may not be their first language. Hence, the relevance of the results/procedures is limited and additional investigations on the utility of computer-based programs in teaching basic reading/literacy skills need to be undertaken.

To conclude, this quasi-experimental study demonstrates that explicit and comprehensive computer-based reading programs implemented over an eight-week period (40 sessions) facilitated the phonemic awareness and word use fluency skills of students at-risk for reading failure in grades K, 1 & 2. Further, the FUNNIX program group had gains on Nonsense Word Fluency (phonics) measure. The results of this preliminary study extends the small literature base on computer-based reading programs and suggest the two computer-based programs can be used as supplemental programs by parents during summer break to facilitate phonemic, word use fluency, and/or phonics skills (with FUNNIX) of students at-risk for reading failure.

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# Statements Not Questions: A Reading Comprehension Instruction Strategy

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The National Reading Panel Report in the United States (National Institute of Child Health and Human Development [NICHD], 2000; Yell, 2006) stated that there are five components essential to reading instruction; (a) phonemic awareness, (b) phonics, (c) fluency, (d) vocabulary, and (e) comprehension. Although all five components are essential to become a successful reader, reading comprehension will be the focus of this article. Reading comprehension is considered the construction of the meaning of written text through a reciprocal interchange of ideas between the reader and the message in a selected text (Harris & Hodges, 1995.).

Reading comprehension can be difficult for English Language Learners and other students who might be categorized as students with special needs. The difficulty is magnified when reading comprehension instruction only includes testing the student's understanding of the material that was read. In this testing comprehension version of instruction the only feedback given to the student is that his or her answer was correct or incorrect. This type of reading comprehension instruction does not help the student learn strategies that will promote her or his ability to understand books and other print material he or she is reading. Vacca et al. (2009) point out three dimensions of reading comprehension instruction, which include: (a) scaffolding a students' development and facilitate use of comprehension strategies through explicit instruction, (b) developing students' awareness of story structure, and (c) guiding students' interactions with texts as they read.

Reading comprehension instruction that helps guide the students' interactions with text needs to include discussions about the material that was read and the meaning the students have formed from reading it. Statements Not Questions is a reading comprehension instruction strategy that can promote students' ability to understand stories they are reading in class. This comprehension instructional approach can be helpful to all readers, including those students who are struggling to learn to read. The Statements Not Questions comprehension instruction strategy provides an opportunity for the students and the instructor to discuss their responses to a series of statements related to the story they read.

## Description of the Statements Not Questions Strategy

In the Statements Not Questions strategy the students all read the same story or section of a book or article. The students are given a set of statements to react to as they read and as they finish reading the story. The students have to decide if each statement is true according to what was stated in the story, probably true according to what was stated in the story, probably false or definitely false according to what was stated in the story. The students can write down their reason for their decision to choose either true, probably true, probably false or false. When everyone has completed the reading and made a decision about each statement then the group can discuss the decisions they made for each statement and why they made that decision. The students' support for the choice they made needs to be related to the content of the story that was read.

## Sample Story with Statements

One day a little boy named Johnny was crying. He ran to Ms. Smith to tell her that he had fallen and hurt his knee. Ms. Smith looked up at Johnny and in a kind voice said, "I'll put a band aid on it."

Based on the story above, decide if each of the statements below is true, probably true, probably false, or false. Be ready to tell us why you chose your answer.

1. Johnny is a boy.
2. Ms. Smith is a teacher.
3. Johnny is taller than Ms. Smith.
4. Johnny was crying because he hurt his back.

In the example above, a reader could decide that the statement "Johnny is a boy." is true; because it says in the story Johnny is a little boy. Most people reading the story would probably agree with that decision. However the next statement is open to debate. A reader could believe that Ms. Smith is in fact a teacher, because teachers work with young children and sometimes supervise them on playgrounds. This reader could decide that the statement is true. Another reader might decide

it is probably true using the same rationale, but because it is not directly stated that Ms. Smith is a teacher decided to use probably true. A third reader might decide the statement is probably false. The third reader had been at a school where aides or playground supervisors not teachers supervised the children on the playground and that led him or her to think Ms. Smith is probably not a teacher. Which student is correct? All three of the students are correct, it is not which decision is made, but how it is justified. The discussion will be based on the content of the story read and how it is interpreted by each student. That interpretation will be influenced by each student's background of experiences and stored knowledge. This activity of bringing an individual reader's background knowledge to a story and seeing how it influences her or his comprehension of a story is much more likely to help promote the student's reading comprehension ability than just asking questions and marking the student's responses as being correct or incorrect.

### **Summary of Strategy**

The most important point in using the Statements Not Questions strategy is to have the students discuss the decisions they made to each of the statements. The discussion allows the comprehension process to be more explicit which can promote the students' ability to understand other stories they read in the

future. Students may need to participate in the strategy several times before they become comfortable with it. Initially it is recommended that short stories with five or less statements be used. As students become familiar and more comfortable with the Statements Not Questions strategy, more statements and longer stories can be used. Once the students reach a reasonable level of comfort and competence with the Statements Not Questions strategy, the strategy can also be used with non-fiction reading material. It is also helpful to select literature that is culturally relevant to students, especially for English Language Learners (Vacca et al., 2009).

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# INTERNATIONAL ASSOCIATION OF SPECIAL EDUCATION

in collaboration with the

University of Alicante,  
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**Eleventh Biennial Conference**  
**July 12 – 16, 2009**

**Alicante, Spain**

**Broadening the Horizon: Recognizing,  
Accepting, and Embracing Differences  
to Make a Better World for Individuals  
with Special Needs**



Universidad de Alicante, Facultad de Educación  
Grupo de Investigación “Diversidad, Educación Especial e Inclusión”

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Diversity and Special/Inclusive Education Research Group

## CONFERENCE REGISTRATION INFORMATION

**Registration.** Please register early to avoid a late fee. A registration form is included with this flyer, or you may download it from the IASE website at <http://www.iase.org>. E-mail confirmation will be sent upon receipt of your registration and payment. Please note that no credit cards will be accepted on-site.

**Conference Materials.** Conference materials may be picked up between 1:00 – 6:00 p.m. on Sunday, July 12, 2009 at the IASE registration desk located at the University of Alicante in the Aulario II building.

**Gala Dinner and Auction, July 14 at the Salones Del Mar Hotel.** The Gala dinner, included in your registration fee, will be held on Tuesday evening, beginning at 7:00 p.m. Ethnic dress is encouraged.

Each individual is invited to bring an item from his/her country for the auction. You may drop off your auction item(s) when you pick up your registration materials. There will be a “silent” auction prior to the Gala Dinner and a “live” auction following the dinner. Proceeds from the auction will go to the Marge Csapo Scholarship Fund.

**Accommodation Options.** The conference has arranged for accommodations at three different facilities. When making your reservation, indicate that you are attending the conference of the International Association of Special Education. Rates are good for July 8 through July 20, 2009. Please go to the website: <http://www.iase.org> for information on each of the accommodation options.

- **Tryp Gran Sol** – The Tryp will be the headquarters hotel. All tours will leave from the Tryp hotel. The Tryp is an “all suites” facility (foyer, bedroom, sitting room with TV, private bath). Higher floors have the best views.
- **Meliá Alicante** is a modern large hotel located at Plaza del Puerto, 3 03001 Alicante, about 2 blocks from the Tryp Gran Sol Hotel.
- **La Villa Universitaria** is a large dormitory on the campus of the University of Alicante. It is about a 15-minute walk to the Aulario II, location of the conference. Individuals who stay at this facility may access the city bus by walking about 2 blocks. Once you exit the bus downtown, you will walk about 5 blocks to get to the Tryp Gran Sol. From La Villa, IASE will only provide bus service on Tuesday evening for the Gala Dinner.

**Transportation.** You will likely arrive at the Alicante Airport located about 11 kms from downtown Alicante. Travelers going to and from the airport can either go via taxi, bus, or car. **Taxi** - There are taxis available from the taxi rank, which is located in front of the Arrivals Hall. **Bus** - There are scheduled buses that run every hour to and from Alicante central bus station. All buses depart from opposite the Arrivals Hall.

**Tours.** There will be a variety of tours offered beginning on Saturday, July 11 through Friday, July 16. For information about tours go to <http://www.iase.org>.

**Children’s Art.** To showcase children’s art projects from your home country, please bring them to the Children’s Art Desk, located in the Foyer of Aulario II. Children’s art work will be sold. For more information, contact Barry Birnbaum – [birnbaum30@sbcglobal.net](mailto:birnbaum30@sbcglobal.net) OR Karen Nonis – [karen.nonis@nie.edu.sg](mailto:karen.nonis@nie.edu.sg).

**Conference Proceedings.** A copy of the CD-ROM proceedings of the conference will be included as part of the registration materials.

**For More Information.** Contact Conference Chair, Lyndal M. Bullock at [lyndal.bullock@unt.edu](mailto:lyndal.bullock@unt.edu).

# CONFERENCE SCHEDULE

## **Saturday, July 11**

Optional Tour: Flea Market and Ceramic Factory Shopping in Spain; 9:00 a.m. – 3:00 p.m. (\$20.00 USD)

## **Sunday, July 12**

Optional Tour: City Tour of Alicante; 9:00 a.m. – 2:00 p.m. (\$20.00 USD)

Conference Registration at University of Alicante, Aulario II, 1:00 p.m.– 6:00 p.m.

Tour Desk: (including box lunch sales) 1:00 p.m. – 6:00 p.m.

## **Monday, July 13**

Buses leave the Tryp at 7:30 a.m. for the University of Alicante (and leave for the return at 4:15 p.m.)

Opening of Registration Desk, Tour Desk, Exhibits (including student art display) and Morning Coffee: 8:30 a.m.

First General Session featuring Professor Carmen Jiménez Fernández, Madrid, Spain: 9:00 a.m. – 10:15 a.m.

Conference Sessions: 10:30 a.m. – 4:00 p.m.

## **Tuesday, July 14**

Buses leave the Tryp at 7:30 a.m. for the University of Alicante (and leave for the return at 4:15 p.m.)

Opening of Registration Desk, Tour Desk, Exhibits, and Morning Coffee: 8:30 a.m.

Second General Session featuring Professor Miguel Ángel Verdugo, University of Salamanca, Salamanca, Spain: 9:00 a.m. – 10:15 a.m.

## **Tuesday, July 14 (cont.)**

Conference Sessions: 10:30 a.m. – 4:00 p.m.

Gala Dinner (at Salones Del Mar Hotel) Silent Auction and Cash Bar: 7:00 p.m. Dinner with entertainment by APSA's Dance Troupe: 8:00 p.m. (Bus departs La Villa Universitaria at 6:30 p.m. to Salones Del Mar Hotel and returns after the Gala Dinner.)

## **Wednesday, July 15**

Buses leave the Tryp at 7:30 a.m. for the University of Alicante (and leave for the return at 4:15 p.m.)

IASE General Business Meeting: 8:00 a.m.

Opening of Registration Desk, Tour Desk, Exhibits, and Morning Coffee: 8:30 a.m.

Third General Session featuring Professor Lani Florian, University of Aberdeen, Scotland; 9:00 a.m. – 10:15 a.m.

Conference Sessions: 10:30 – 4:00 p.m.

Optional Tour: Benidorm Palace (Dinner/Show): (\$80.00 USD); estimated time 8:00 p.m. - 1:00 a.m.

## **Thursday, July 16**

IASE Board Meeting (open to membership) 7:00 a.m.

Optional Tour #1: School Tour, 9:00 a.m. – 12:00 Noon (\$10.00)

Optional Tour #2: Repeat School Tour, 1:00 p.m. – 4:00 p.m. (\$10.00)

## **Friday, July 17**

Optional Tour #1: Elche Excursion, 9:00 a.m. – 2:00 p.m. (\$20.00 USD)

Optional Tour #2: Alicante, Jalon, and Benidorm, 5:00 p.m. – 11:00 p.m. (\$25.00 USD)

## KEYNOTE SPEAKERS

### **Monday, July 13, 9:00 – 10:15 a.m.**

Professor Carmen Jiménez Fernández, Facultad de Educacion, Universidad Nacional de Educacion a Distancia, Madrid, Spain. Topic: *The Education of the Gifted and Twice Exceptional Students in Spain: Problems, Promises, and Dilemmas.*

### **Tuesday, July 14, 9:00 – 10:15 am.**

Professor Miguel Ángel Verdugo, Facultad de Psicología, Universidad de Salamanca, Salamanca, Spain. Topic: *Employment of People with Disabilities and Quality of Life: Vision and Reality in Spain.*

### **Wednesday, July 15, 9:00 – 10:15 a.m.**

Professor Lani Florian, School of Education, University of Aberdeen, Aberdeen, Scotland. Topic: *Special and Inclusive Education in Europe.*

## PLENARY SESSIONS

### **Monday, July 13, 1:00 – 1:45 p.m.**

Richard Van Acker, University of Illinois, Chicago, USA. Topic: *Youth Aggression and Violence: How Can We Address This Global Challenge?*

### **Tuesday, July 14, 1:00 – 1:45 p.m.**

Juane Heflin, Georgia State University, Atlanta, USA. Topic: *The Growing Prevalence of Autism Spectrum Disorders: A Challenge of International Proportions.*

### **Wednesday, July 15, 1:00 – 1:45 p.m.**

Mary Gale Budzisz, Pawleys Island, South Carolina, USA and Marge Csapo, British Columbia, Canada, retired educators. Topic: *Volunteer Service Projects: Opportunities and Challenges.*



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