

PERCEPTIONS OF DISABILITY AND ACCESS TO INCLUSIVE EDUCATION IN WEST AFRICA: A COMPARATIVE CASE STUDY IN DAKAR, SENEGAL**Elizabeth R. Drame****Kaytie Kamphoff***University of Wisconsin-Milwaukee*

Educating students with disabilities in an inclusive general education setting has been shown to increase academic achievement, increase peer acceptance, increase self-esteem, create a richer friendship network, and have positive lifetime benefits (higher salaried jobs, independent living). In addition, inclusion can have benefits for students without disabilities. The West African nation of Senegal has pledged to increase inclusive education for students with disabilities by 2015. Issues that affect inclusive education for all in Senegal are access to schooling, community and societal perceptions of individuals with disabilities, poverty, and teacher training and pedagogy. To increase inclusive education for all in Senegal the country must increase access to schooling through physical accessibility and decentralization, create community awareness campaigns that increase knowledge of disabilities, and develop teacher training that fosters a student-centered pedagogy.

Current data by UNESCO (2000) and ACPF (2011) find that one in every ten children in Africa has some type of disability. Since the early 1990's, there is movement towards educating students with special needs in an inclusive school environment (Ruijs, Van der Veen & Peetsma, 2010). This international push towards meeting the basic learning needs of all people was first declared at the Jomtien Education for All (EFA) Conference in 1990, and reaffirmed at the ten-year follow up in Dakar, Senegal, West Africa at the 2000 World Education Forum. At the Dakar conference, over 164 government agencies pledged to achieve EFA (UNESCO, 2000). The conference targeted different populations of young, under-served learners – girls, people in poverty, ethnic minorities, and students with disabilities – pledging to meet their educational needs by 2015. The participating governments pledged to meet the educational needs of girls, people in poverty, ethnic minorities, and people with disabilities by 2015. In addition, the participating governments resolved to make primary education accessible, free, compulsory and of good quality (UNESCO, 2000). For many children with disabilities, a good quality primary education would be in an inclusive school, learning together with their non-disabled peers. The Dakar World Education Forum emphasized the need for national and funding agency policies to reflect broad EFA goals for all, including those with 'special learning needs'. Inclusive education though should not focus exclusively on improving economic development. Inclusion is a matter of social justice, as all human beings are citizens no matter if they happen to have a disability.

Education for All

In April of 2000, the United Nations Educational, Scientific and Cultural Organization (UNESCO) held The World Education Forum in Dakar, Senegal. The goal of this forum was for the international community to adequately meet the educational needs of all children and adults by 2015. The forum reaffirmed the vision of the World Declaration on Education for All. The Dakar Framework was adopted by Senegal in 2000. For the past 13 years, Senegal has been working towards attaining the framework's six main goals related to a) early childhood care and education; b) access to quality, free, compulsory primary education; c) meeting the learning and access needs of youth and adults; d) improved adult literacy and access to continuing education; e) gender equality in access to quality primary and secondary education; and f) improved quality of education resulting in improved measurable outcomes in literacy, numeracy, and life skills (UNESCO, 2000). UNESCO recommended that to achieve these goals countries pledge to create safe, healthy, inclusive and equitably resourced schools, with rigorous learning for all. There has never been a greater urgency for inclusive public education in Africa, and especially

Senegal. On May 26, 2010 Senegalese Parliament (Senate and National Assembly) passed the Law of Social Orientation. This law calls for providing children and youth with disabilities the right to a free education and the right to be educated in mainstream school settings and attend schools located as close as possible to their neighborhoods (ACPF 2011b). The Senegalese government has declared the necessity to include students with disabilities in the mainstream school setting, but Senegal has a very long way to go before educational progress and equality is made for these students. The call for more inclusive educational practices highlights the need to better understand the barriers to inclusion that children with different disabilities (e.g., visual impairments, auditory impairments, cognitive delays, etc.) face in order to successfully implement policy driven by international human rights values.

The purpose of this paper explores the level of inclusiveness in education for children with disabilities in a country in the most vulnerable of regions, Dakar, Senegal. This will be accomplished via two means: a) a comprehensive review of the current literature on inclusive education in Senegal and sub-Saharan West Africa; and b) a qualitative ethnographic case study conducted with children, family members and staff at two specialized centers for children with disabilities in Dakar. Specifically, the paper will examine the following questions in relation to the literature and in relation to the perspectives of people in the field and on the ground living the reality.

1. To what extent do separate educational and therapeutic services delivered in specialized centers in Dakar, Senegal meet the educational and socialization needs of children with disabilities?
2. What structures (e.g., social relational, physical, psychological, cultural, organizational) impede or facilitate inclusive education for children with disabilities in Dakar, Senegal?

The Sub-Saharan Africa region of the world was chosen as the focus for this study is due to the impact of persistent poverty on traditionally marginalized populations, such as children with disabilities. Countries in Sub-Saharan Africa include: Benin, Botswana, Burkina Faso, Cameroon, Chad, Congo (Brazzaville), Congo (DRC-Kinshasa), Ethiopia, Ghana, Ivory Coast, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leon, South Africa, Swaziland, Tanzania, Togo, Uganda, Zambia. Despite steady economic growth in many countries in Sub-Saharan Africa, the existence of high levels of inequality has reduced the positive effect of this growth on poverty reduction (World Bank, 2013). Inequality due to gender differences, ability differences, and social divisions resulting from differences in family wealth all lead to inconsistent access to income and education. According to the Africa Learning Barometer, the level of extreme *education* poverty or having fewer than two years of education, is much higher among the poor (Van Fleet, Watkins, and Greubel, 2012). The primary author conducted the case study in Senegal as a Senior Research Fellow for the Fulbright African Regional Research Program.

The results integrate themes from both the literature review and the case study throughout. Ultimately, the study investigates the current state of Senegal's commitment to educating students with disabilities, advocates for the benefits of inclusive education, and determines how those benefits can realistically be implemented in Senegalese public schools in a culturally sensitive and responsive way, given societal barriers to inclusion. The paper concludes with discussion and reflection on next steps for moving Senegalese public schools towards inclusion of students with disabilities in the general education classroom.

Background on the Educational System in Senegal

It is important to briefly describe the structure of the educational system in Senegal. Both formal and informal public and - in increasing numbers - private educational systems function in Senegal. Schools delivering formal education in Senegal are organized in four levels: preschool, elementary, secondary school (general academic or technical/vocational), and higher education or l'éducation préscolaire, l'enseignement élémentaire, l'enseignement moyen/secondaire (general or technique/ formation professionnelle) and l'enseignement supérieur (Gueye et al., 2010).

Preschool or préscolaire is divided into three years/levels (petite section, moyenne section, and grande section) from 3 through 5 years. The majority of preschools are located in Dakar, Thiès and Ziguinchor (African Child Policy Forum, 2011b). Elementary schools typically enroll children from 7 to 12 years old. Students complete six levels of elementary education: cours d'initiation (CI), cours préparatoire (CP), cours élémentaire première année (CE1), cours élémentaire deuxième année (CE2), cours moyen première année (CM1), and cours moyen deuxième année (CM2). Students continuing on to secondary

or middle/high school can pursue one of two tracks, an academic track and a technical/vocational track. Middle school has four levels numbered downward from 6th year to 3 year (or sixième to troisième) and high school has three levels from 2nd year to terminal year (or seconde to terminale). At the end of their terminal year, students typically sit for the baccalaureat exam (DPRE, 2004).

The informal education sector consists of private, non-governmental organizations (NGO) and informal entities, such as street and community schools (le secteur de l'éducation non formelle) focused on basic education related to developing proficiency in reading, writing and math skills in the national language, French. Religious Islamic schools are considered part of this sector, as well as organizations focused on adult literacy training (l'alphabétisation) for illiterate individuals 15 years and older.

Centers targeting children with special needs are increasingly acknowledged as an important and growing part of both the informal and formal public and private educational system (DPRE, 2004). The majority of special or segregated establishments provide elementary education for children across a wide range of ages from 4 through over 30 years old. Results from the literature review and case study include a description of the types of options available.

Methods

This study occurred in two phases. Prior to conducting the case study in 2011-12, the researcher conducted a literature review to determine the current extant research on inclusive education for children with disabilities in Sub-Saharan Africa, Senegal in particular. The literature review was supplemented post-case study to include any recent relevant studies. The following section situates the overall study within sociocultural and emancipatory theoretical perspectives. Then, methods for searching the literature and conducting the case study are described. The study was approved the Institutional Review Board for Human Subjects Protection at the University of Wisconsin-Milwaukee and with the consent of every participant.

Theoretical Perspectives

The participatory evaluation or needs assessment phase of the study was framed within Vygotsky's sociocultural theory which stresses the mediating influence of social and cultural factors on cognition and learning (Blunden, 1997; Sullivan & Palincsar, 1998). Social interaction mediated by cultural tools, such as language, symbols, and traditions create the conditions needed to encourage the development of cognitive structures and understanding. Depending on the type of learning to be fostered (i.e., new skills vs. application of learned understandings to novel contexts), peer-to-peer or child-to-adult social interactions centered around tasks, problems, and cognitive conflicts facilitated by tools create the conditions for the co-construction of knowledge and the internalization of learning processes that will allow for the independent problem solving.

Research questions were framed from a social justice perspective to surface conditions and represent contexts that serve to marginalize the disability community and individuals with disabilities. The researchers relied heavily on the perspectives of the participants in developing understanding of the complexity of disability identity and perception. This perspective led framing discussions and questioning in as open a manner as possible to resist predisposing a certain response from participants. The primary researcher was also embedded as a member in many of the sociocultural contexts in which the research occurred and was part of co-developing unique understandings of disability and potential in educational settings. So the contributions and interactions were reciprocal as researcher provided a service (training, professional development, intervention sessions etc.), while research participants provided personal perspectives, information, and key data.

Senegalese society is one that highly values family, community, language, and social interaction. This is evident in a variety of ways, superficially including the amount of time spent in greeting others, in socialization around meals and in traditions of extended, highly verbal discussions and debates around a variety of topics at all ages. Divorcing children with disabilities from these social and cultural contexts necessary for learning has a long lasting effect on cognitive development. Exclusion from daily social interaction and dialogue in home settings, as well as separation from typically developing peers in school settings has a cumulative impact on the development of shared understandings and generalization of the use of interactional cognitive structures to support ongoing individual knowledge development and application.

A transformative lens was employed to guide the action phase of the research. As co-creation of understanding of disability occurred, particularly autism, the research moved to using this shared understanding to actively intervene in the social and cognitive condition of these children on an individual level and at an institutional level, to advocate for political pressure to move for implementation of the inclusive education law.

Literature Review Methods

A search of the following electronic databases was conducted to identify research studies regarding inclusive education for children with disabilities in Sub-Saharan Africa, particularly Senegal: Academic Search Complete (EBSCO), Academic Search Premier, Education Research Complete, ERIC, Social Sciences Full Text, Urban Studies Abstracts, PsycINFO, Humanities International Complete, and Google Scholar. The time frame for articles included in the review was from 1990 to the present. The following terms were used in combination with Sub-Saharan Africa, West Africa, Senegal and disabilities: inclusive education, perceptions, education access, and barriers to education.

In addition to accessing literature from research databases, published reports of select organizations operating in the region were also reviewed. These reports were generated by organizations including, the African Child Policy Forum (ACFP); United Nations Educational, Scientific, and Cultural Organization (UNESCO); the World Health Organization (WHO), and the Africa Governance Monitoring and Advocacy Project (AfriMAP), Open Society Initiative for West Africa's (OSIWA), and the World Bank. These searches yielded empirical studies, news reports, literature reviews, organizational reports from international organizations, book chapters, and policy documents considered appropriate for addressing the research questions posed.

Methods for the Qualitative Comparative Case Study

A descriptive comparative case study was conducted over an eight month period while the primary researcher was immersed in the broader disability community during the 2011-2012 academic year in Dakar, Senegal. Multiple case study design was selected as the methodological approach (Yin, 2003) because of an interest in exploring the nature of services available to children with disabilities within different contexts to examine intersecting and co-constructed realities in the education of children with disabilities (Baxter & Jack, 2008). This required an immersion into the contexts in which these services were delivered and an exploration of multiple perspectives and information sources to create a multifaceted picture of the nature of educational and therapeutic services provide to children with disabilities in segregated settings. The primary researcher was embedded in two specialized centers for children with disabilities, one public and one private, which constituted the contexts of my two cases. During her at these centers, the researcher conducted a participatory evaluation of the quality and inclusiveness of service delivery based on interviews, observations, and participation in staff meetings. As the status of the primary researcher shifted from outsider observer/evaluator to insider participant observer, the researcher was incorporated into the general operations of each center, tasked with co-planning and co-delivering interventions sessions focused on development of cognitive, communication, and social skills as a form of professional development.

In addition to the cultural immersion in the two centers, the primary researcher developed relationships with disability advocates, such as the director of Special Olympics Senegal and the leader of parent organization focused on families with children born with arthrogyriposis. These relationships led to additional collection of qualitative data related to values, beliefs, behavior and language related to individuals with disabilities in Dakar. These understandings were captured through extensive field notes, observations notes, collaborative projects such as co-developed and delivered intervention sessions and grant writing, and document reviews. The results paint a picture, integrated with the literature, of similarities and differences in lived experiences of children and their families with different disabilities, physical and cognitive in particular. This portrait highlights the inherent inequities in quality and access in the system of services available to the disability community and the potential opportunities for increased inclusive education.

Case and Participant Selection

To address the first research question regarding the impact of separate services on outcomes for students with disabilities in Senegal, a descriptive comparative case study was conducted on two centers. The unit of analysis or case was educational and therapeutic services delivered to children with disabilities in segregated settings in Dakar, Senegal. Between-case comparative analyzes, as well as a within-case analysis were conducted. The selection of the two centers was dictated by several factors, including

geographical location, public vs. private funding support, and type of student served. The centers selected were limited to the capitol city of Dakar. The primary researcher randomly selected one private and one public center to collaborate with and presented the study to the center directors for their approval. The two sites selected initially both agreed to participate in the study. The two selected sites were similar in several areas, but had some key differences centered on a specific independent variable, in this case, public, primarily government-supported vs. private, primarily sponsor/donor-supported and the nature of the study population they served.

Description of Case #1 Context. The Public Center (hereafter referred to as PUC) is a public institution established over 30 years ago, designed to address the education and rehabilitation needs of children with physical disabilities. As a public center, PUC is under the jurisdiction of several governmental ministerial offices. The Ministry of Health is responsible for provision and oversight of financial supports and medical, paramedical and social operations. The Ministry of Education provides teaching staff and monitors their evaluation and ongoing professional development. The Ministry of Social Action is responsible for the allocation of social workers and addressing the variety of social problems facing students and their families.

PUC is located in a populous area of Dakar and is run by a Director who is also a psychiatrist. Over 200 students are served annually by seven teachers. Classes are overenrolled and there is a long waitlist of students. Even though PUC is a public center, students are charged an equivalent of \$10/month to defray some operational expenses and student supplies. Many families however, are not able to pay this modest amount and their children are still allowed to enroll. Teaching staff that are assigned to the school do not receive special preparation for working with children with disabilities. They are expected to learn about specific disabilities and interventions, instructional practices on their own, on the job.

PUC is physically structured into three areas, one building which houses the preschool wing and one building which houses administrative offices and classrooms for the elementary school. These two buildings serve a majority of students with physical disabilities and one classroom of children with multiple disabilities (e.g., cognitive etc.). A third building houses classrooms for children with a range of intellectual disabilities of different levels of severity.

The physical structure of PUC needs significant repairs, renovation and maintenance. Damage from floods during the rainy season delayed the start of the 2011-2012 academic year, which typically begins in October. PUC opened in November due to delays in repairs. A quote from a 2011 news article highlights the despair evident in the students who attend the center and those who work there.

...centre est aujourd'hui totalement délaissé. Le décor est triste; le spectacle désolant et pas beau à voir. Le personnel vit dans la misère totale avec des conditions de travail inexplicables. : difficile de décrire. L'affaissement d'un pan de mûr de clôture au centre ... le danger est visible à l'œil. 'Nous se sommes pas soutenus; les conditions de travail sont difficiles' se désolé un handicapé...Nous ne bénéficions d'aucun soutien; c'est la négligence totale des autorités. (Bah, 2011)

In English...[the] center is now totally abandoned. The decor is sad; a sad spectacle and not a pretty sight. The staff is in total misery with inexplicable working conditions [that are] difficult to describe. The collapse of a section of wall [around] center [shows] the danger is visible to the eye. *We are not supported, and the working conditions are difficult*, laments a student with a disability... We receive no support; it is the total neglect of the authorities.

Description of Case #1 and Participants. The case is focused on the services provided to students with disabilities within segregated specialized centers in Dakar, Senegal. PUC provides educational, rehabilitative and therapeutic services (e.g., physical and occupational therapy, orthotics, prosthetics) to preschool and elementary children aged 6 – 21 years with physical disabilities. The percentage of children enrolled who have other disabilities is rising. Teachers follow a primarily traditional general Senegalese curriculum with very little modification. Upon entry, students are supposed to receive a medical evaluation, the results of which inform the development of a *fiche de traitement* or treatment card. This treatment card summarizes the clinical evaluation results, the focus of rehabilitative physical therapy, and the number of sessions and should be shared with teachers.

A total of 30 individuals participated in interviews/focus groups, professional development sessions, and classroom observations. The group included: five teachers/assistants from the preschool, eight elementary/assistants from the elementary school, four teachers from the building housing students with significant intellectual disabilities, four directors (overall center director and one director per each of the three school buildings), six service providers (doctors, social worker), one parent, one child with autism who participated in intervention sessions, and one occupational therapist intern from Canada. The group included 12 female and 18 male participants.

Description of Case #2 Context. The Private Center (PRC) is located in the same vicinity as PUC. The organization which administers PRC was established by parents of children with intellectual disabilities over 14 years ago. PRC itself has been in existence for ten years. Before attending PRC, an evaluation from a psychiatrist is required to determine the specific type of disability of a child. This evaluation in addition to observation data is used by a multidisciplinary team including parents to develop an individualized education plan. The majority of students are charged a tuition equivalent to \$45/month. In addition to charging tuition, PRC organizes fundraising events throughout the year to support the operational costs of the center since they do not receive any financial assistance from the Senegalese government. The center was built with an open concept design where classrooms lead to an open courtyard play area, the central location for daily recess and large gatherings.

Description of Case #2 and Participants. Currently, PRC employs ten permanent special education teachers, five general education teachers and several interventionists, including a psychomotor specialist, a speech therapist, a psychiatrist, a social worker and several workshop leaders. The majority of children experience a life skills driven curriculum with a focus on activities, such as ceramics, drumming, baking, crafts, gardening, sports etc. In addition to this core focus, students over 15 years are provided with pre-professional training geared towards job skills development in the areas of sewing, hairdressing, shoemaking, cooking, gardening, pottery and carpentry. A small group of students who function at a higher cognitive level are taught courses in reading, writing, math etc. designed to prepare them for integration into a traditional public school.

A total of 20 individuals participated in focus groups, intervention sessions, professional development sessions, and classroom observations. This group included one director (male), nine teachers (seven females, two males), eight students (three females, five males), and two mothers.

Other Study Participants. In addition to gaining perspective on the research questions through being embedded in two specialized centers for children with disabilities, the primary researcher sought input from a broader range of individuals and organizational representatives in the disability advocacy community in Dakar. Using professional connections to schedule interviews with representatives of international educational organizations, parent groups, medical professionals, parents, and disability advocates, the researcher interviewed a total of 21 participants representing 16 organizations. This group included: four representatives (three females, one male) of three local disability organizations, six (female) representatives of five international organizations, four representatives (one female, two males) of three Senegalese schools, and seven parent representatives (six females, one male) of five Senegalese associations/schools.

Data Collection Procedures

Active data collection occurred in phases from May 2011 through August 2012. The first phase involved the literature review search and analysis which occurred from May through August 2011 and then again from May through Aug 2012. After arriving in Dakar in August 2011, September and October 2011 involved interviews with administrative staff at PRC and PUC, interviews with representatives from local disability advocacy organizations, and interviews with parent organization representatives. In addition, education policy and legal documents related to children with disabilities housed in l'Assemblée Nationale (the National Assembly) were reviewed. Teacher interviews and classroom observations were conducted at PRC and PUC, and parent-school team meetings were observed at PRC in November 2011. Representatives from local public Senegalese schools piloting inclusive education initiatives and Senegalese government officials were interviewed in Dec. 2011. A summary of the results of the center-based initial interviews and observations, as well as recommendations for professional development and service delivery modifications were presented to the administrative teams at PRC and PUC in January 2012. From February 2012 through June 2012, large group professional development sessions for PUC, co-taught intervention sessions with PRC and PUC center staff for nine individual students, and continued interviews with representatives from international organizations were conducted.

The following types of data were collected throughout the active data collection process: extant literature from the literature review including peer-reviewed articles and book chapters, observation notes, field notes, unstructured audio-taped interviews, photos, collection of relevant reports and policy documents, summaries of the results of individual intervention sessions, professional development materials, and participant and personal reflections from professional development sessions.

Data Analysis Procedures

The researchers employed a deductive and inductive coding process. The deductive process involved the creation of an a priori code book based on the initial review of the literature, but prior to the review and analysis of the qualitative data collected as part of the case study. Reliability for the initial codes was established by testing the code book against additional studies searched for in 2013. The inductive coding of the qualitative data involved an initial review of raw data (e.g., organizational and policy documents, observation notes, intervention summaries, interview transcripts etc.) and a cross-data source initial summary of broad themes, which were then sorted into the code book. Within each broad theme, 2-3 quotes were identified across multiple sources of raw data that best captured the essence of the theme. The inductive coding process was iterative and reflexive (Fereday & Muir-Cochrane, 2006; Srivastava & Hopwood, 2009).

The preliminary codes became 'nodes' when the raw qualitative data was uploaded into NVIVO for analysis. As archival documents, transcripts and other textual data, were reviewed, new data-driven inductive codes for segments of data that either described a new theme or that expanded on a deductive code were included. All qualitative data were transcribed and coded in the primary language of the data (i.e., Wolof, English, or French). Translation occurred during the write up of the findings. The interpretative phase began after the initial coding, where connections were made across themes and sub-themes within case and across case, identifying affirming and conflicting perspectives on the two research questions.

Validity was established through the triangulation of multiple data sources (e.g., people, documents, literature), use of multiple methods for collecting data (e.g., interviews, participant observation, focus groups, document analysis, literature review), and use of researchers embedded in the Senegalese context who reviewed the findings for their veracity as peer reviewers or auditors. Peer researchers were employed as a form of member checking since language (thematic summary in English not in French) and distance (in the US during the analysis and write-up phase of the study) barriers precluded me from having actual participants verify interpretations of the data.

Results

An analysis integrating findings from the literature review with findings from the comparative case study indicated several broad and complex themes related to access to inclusive education and perceptions of disability in Senegal. The themes fundamentally highlight the concept of access specifically related to access to quality and accurate data, access to quality services and schooling, and access to positive attitudes and perceptions of self and disability.

Data: What We Know and Everything We Don't Know About Disability in Senegal

Senegal devotes a larger share of its budget to education, 5.6% of GDP 2010 (CIA, 2013). This is larger than most other countries with a similar development level (Gueye et al., 2010). However, as of 2003, only 75.8% of the population was attending school, and gender and regional disparities still exist (Boubacar, 2004). In Senegal, over 60% of the population is under the age of 24, with the median age 18 years. In addition, Senegal is seeing a yearly population growth of 2.532%; 29th worldwide (CIA, 2003). The need to educate this increasing population is a priority, especially if Senegal wants to meet the EFA 2015 goals. Successfully achieving EFA goals has the potential to place Senegal as a model for inclusive education in Africa by educating all individuals regardless of disability or educational needs.

The average school life expectancy is eight years total for a male and seven years for females (CIA, 2013). The education system in Senegal is marked by high repeat and dropout rates. Out of 100 children beginning their first year in school, only 48 will complete their final year of elementary school without repeating a grade (Gueye et al., 2010, p. 40). Even higher dropout rates plague students with disabilities and their non-disabled peers. Of the 50% of students with disabilities who have attended school at one point in their lives, 34.2% of that population dropped out of school before they completed their primary

education for various reasons (AFCP, 2011b). Senegal must address this high dropout rate, and take corrective action as addressed in the EFA goals.

A major barrier to developing appropriate supports and service delivery models for children with disabilities in schools in Senegal is the lack of accurate and complete disability prevalence data. While the data is very scarce, the information that is available paints a dire picture. According to the World Health Organization, 1,800,000 individuals of 12 million have a disability in Senegal (COSYDEP, 2011). In addition, 75% of people with disabilities in Senegal are illiterate compared to 60% of the rest of the population and 21% of individuals with disabilities are employed compared to 53% of individuals without a disability (Handicap International, 2010).

La Coalition des Organisations en Synergie Pour la Défense de l'Education Publique or the Coalition of Organizations in Synergy for the Defense of Public Education (COSYDEP) conducted a participatory study to capture data on the number of children, types of disabilities, and level of education in five large towns outside the capital city of Dakar (2011). They employed multiple methods to garner the data, including interviews, home visits, and school visits, using a grassroots approach to garner information about children with disabilities who should be in school but who are often hidden and excluded. The results of COSYDEP's study indicated that of 3,229 students across the five schools, 297 were children with special needs. The majority of these identified children had visual impairment (35%), with the remaining areas of disability including physical disabilities (9.4%), speech and language impairment (7.4%), hearing impairment (5.4%) and cognitive disability (5.4%). A large percentage of these children had health issues, including asthma (30%). COSYDEP conducted a door-to-door campaign to identify the number of children with special needs not enrolled in school. They located 74 of these children. The majority of these children lived in large family households and 67.6% of them had parents who did not know how to read and write themselves. Parents cited a number of reasons for not enrolling their children in school, including but not limited to fear of violence and sexual harassment and the lack of physical accessibility to classrooms and bathrooms.

When examining the characteristics of the children enrolled in the two case study specialty centers, it is clear that students present with a range of difficulties. The PUC center grounds includes a standalone center focused on teaching students with a range of intellectual disabilities including traumatic brain injury, down syndrome, and severe autism. The class size in these two centers ranged from 12 students aged three to five years with physical disabilities and language impairments to 33 students with significant intellectual disabilities, behavioral issues, language impairments and other learning difficulties. The PRC center enrolls approximately 120 children with intellectual disabilities ranging in severity from mild to severe aged 5 to 15 years and a group of children over 15 years. Their class size is more reasonable, ranging from 6 to 15 students per class.

Data gathered via ethnographic means indicated that the children are present in their communities and these data included only those who accessed schooling in the case of the centers or whose families opened their doors to field researchers in the case of the COSYDEP study. These data indicate a real and large population of children with a range of disabilities, particularly intellectual disabilities in or near urban population centers. The data do not address the prevalence of disability in rural areas in Senegal. Accurate and current data regarding the prevalence of disability in the school-age population in Senegal is needed to push for action towards equitable access to education.

Access to Quality Services and Schooling

The number of schools in Senegal has increased from 4,751 schools in 2000, to 6,460 in 2005, an increase of 36% (Gueye et al., 2010, p. 6). However, only 39% of those schools offer a complete cycle of schooling, and the majority of the schools offering a full cycle of schooling are located in urban areas like Dakar or Thies (Gueye et al., 2010). Pre-schooling for children three to five years old can be found mainly in urban towns, with 72% of establishments located in Dakar, Thies and Ziguinchor (Gueye et al., 2010, p. 30). In 2002, 39.3% of the total population of Senegal could read and write. Out of that 39.3%, over 50% were male, and only 29.2% were females (CIA, 2013). Exclusion from public educational institutions remains a major problem for certain populations of children; such as, children from rural homes, poorer urban households, girls, and students with disabilities (Gueye et al., 2010).

There are specialty schools, including PUC and PRC, which serve all of Senegal. These schools or centers are primarily located in or around Dakar and are not well-positioned for national coverage (Aslett-Rydbjerg, 2003). The specialty schools are primarily segregated by a disability, which does not

take into account students with multiple disabilities, and assumes that an accurate diagnosis has occurred. In addition, these schools, with large wait lists and problems with over-crowding and a lack of resources, are supposed to provide rehabilitative services to students. For example, the mission of the PUC center is to address not only students' educational needs, but also their need for physical rehabilitation in the form of physical and occupational therapy. However, students routinely receive therapeutic sessions two to three times per year rather than on a weekly basis. As a result, students who could be very ambulatory, are instead relegated to wheelchairs or 'marcher à quatre-pattes', walking on all fours. The PRC center's fees pay for some limited access to professionals, such as doctors, dentists, and speech and language pathologists. However, their challenge was the disconnect between the level of need for intense and consistent therapeutic services and the lack of qualified professionals to meet the demand. Both centers attempted to address this demand through international partnerships with training schools who send occupational, physical, and speech therapy interns to the centers for two to four month internships. However, this was only a temporary and unsustainable fix to address the lack of qualified Senegalese specialists in these fields.

In a study done by the African Child Policy Forum (2011b), nearly 50% of children identified with disabilities do not attend school. Of that 50%, 65.8% have never attended public school. Some of the reasons for not attending included, a) schools' refusal to accept children with disabilities (8.5%); b) poor health of child (34%); c) lack of school readiness (6.4%); d) family refusal to enroll their children (8.5%); e) no available neighborhood school (2.1%); and f) teachers' unwillingness to accept children with disabilities in their classrooms (12.8%). One participant in my study who worked for the Ministry of Education highlighted poverty as a key factor impeding families' willingness to enroll their children with disabilities in school because these children were often a source of income for the family (Kumar, 2013). One respondent summarized this situation in the quote below.

La famille l'utilise pour manger. On lui demande d'aller mendier. Si tu prends cet enfant, tu l'emmène à l'école, la famille n'a plus de ressources. Cet enfant, cette une arme. Il leur permet de survivre. La famille va se dire, attends si je l'envoie à l'école, je ne vais plus manger. Donc si tu convaincre la famille, parfois il attends quelque chose en retour. Il faut comprendre leur situation. Donc ca n'est pas du tout facile. Tu rencontre des situations qu'il te font vraiment parfois meme pleurer.

Translated as...

The family uses [the child] to eat. They ask their child to go beg. If you take this child and bring him/her to school, the family does not have any more resources. This child is a weapon [against poverty]. He permits [the family] to survive. The family is going to say, if I send him/her to school, I will no longer eat. So if you convince the family [to enroll their child in school], sometimes they are waiting for something in return. You have to understand their situation. Therefore, it is not at all easy. Sometimes you encounter situations that really sometimes make you cry.

An interview of an inclusion advocate conducted by the primary researcher reinforced the need for all public schools to be inclusive environments (Fortier, 2012). In response to the demand created by the pilot inclusion project instituted in five public schools surrounding Dakar, he indicated that,

Sur les nombre d'enfants qu'on avait identifié, aujourd'hui il y a plus d'enfants qui viennent. C'est vraie que cette une bonne chose, mais dans la prise en charge aussi, ca pose problème et tu ne peut pas refusé aux enfants l'access. Tu ne peut pas dit non ne venait pas. Tu sais maintenant la population commence à s'interesser à cette l'éducation inclusive donc il y aura un demande mais est-ce que l'école, par exemple, à Pikine, il y a une seule ecole la bas. L'école ne pourra pas acquerir tout le monde.

Translated to..

Regarding the number of children [with disabilities] we have identified [that could be enrolled in schools], today, there are more children who are coming. It is true that this is a good thing, but, regarding the support they need, it causes difficulties because you cannot refuse children access [to schools]. You can't say don't come. You know now that the population is becoming interested in

inclusive education so there is a demand, but this school, for example, in Pikine, is the only [inclusive] school there. The school can't accommodate everyone.

Getting to school, particularly when there is a limited number of schooling options available, is a critical barrier. One respondent interviewed for my study indicated *ils ont un probleme de transport parce que meme si ils veulent venir mais il y a des enfants handicapés vivent dans des situations extreme pauvrete ou leur parents n'ont pas les moyens. Donc si tu reussi à convaincre les parents, ils te disent – oui, j'accepte, je va l'emmenner l'enfant – sont problemes est est-qu'il pourra avoir de l'argent pour assurer son transport?* This quote is translated as *They have a problem with transportation because even if they [children] want to come, the children with disabilities live in extreme poverty where their parents do not have the means. Even if you convince parents, they tell you – yes, I agree, I will bring my child [to school] – will they have the money to provide their children transportation?* The answer in the majority of cases is no.

Many children with disabilities lack orthopedic devices (canes, crutches, hearing aids, glasses, etc.) that would make maneuvering around the school building a real barrier for students with disabilities (ACFP 2011b). In rural and urban areas, school facilities are often inaccessible for students with physical impairments. New public buildings and infrastructure are not designed to accommodate the needs of persons with disabilities (ACPF, 2011b). One educator interviewed in the African Child Policy Forum report (2011b) stated *children with physical disabilities are more likely to go to school, but unfortunately the schools are inaccessible. There is sand everywhere and there are stairs at the entrances to the building* (p. 36). One parent of a child with a physical disability interviewed as part of my study, sought grant money to have a ramp installed in a public school in Dakar and to make one toilet accessible to allow her son, who refused to attend a specialty school, the ability to attend the school and physically navigate the environment. It is important to note that this parent worked at the school as a teacher and had the backing of the administrator and educational staff. Despite this parent's success, a family should not be required to secure funds and lead the costly physical retrofitting of an existing school building just so her son and others with physical impairments could attend school. There should be governmental commitment to build structures with diverse users in mind, creating more accessible and accommodating buildings (Hitchcock et al., 2002).

Another issue for students with disabilities when accessing schools is overcrowding. Average class sizes in Senegal are between 50-60 students, in very small, cramped rooms (Aslett-Rydbjerg, 2003). Overcrowded classrooms make the learning environment inaccessible for students with orthopedic needs because they are unable to move around the classroom. In addition, overcrowding is problematic for students with attention, vision or hearing impairments, or behavioral challenges. For instance, an overcrowded classroom could be too noisy for a student with a hearing impairment, making it difficult to hear the teacher. The student with vision impairments may not be able to see the board or read available materials. Students with attention or behavioral difficulties may be over-stimulated. Despite adoption of international conventions supporting Education for All and inclusion promoted by intergovernmental organizations such as UNESCO and the World Bank, access to quality special education services and free and appropriate public education remains in the distant future for countries like Senegal (Anastasiou & Keller, 2011).

Cultural and Societal Perceptions of Disabilities in Senegal

Negative attitudes towards family members with disabilities contribute to their exclusion from daily life activities (ACPF 2011b & ACPF 2011c). In addition to exclusion, negative attitudes can hinder the development and self-actualization of children with disabilities. A family's and community's negative perceptions towards persons with disabilities in Senegal can lead to their exclusion from education and society. In one study done in Senegal, 32.9% of respondents excluded children with disabilities from family gatherings (ACPF, 2011b). Abandonment of child and mother is often a by-product of these perceptions. During an interview with the African Child Policy Forum (2011b) one mother of a child with a disability stated:

My husband abandoned me and then divorced me three months after our child was born with an innate disability. He was influenced by his family who told him that I had brought bad luck into his family, that I had changed their lineage and that I was a 'sopiket' –cursed, a carrier of bad luck (p 32).

This blame and abandonment leaves the mother and child isolated from the community and society (Fontaine, 2010). During an interview conducted by the African Child Policy Forum (2011b) one parent expresses frustration:

The public (the people on the street) doesn't help facilitate the social integration of people with disabilities. One day I went to the hospital with a child. Another child, looking at her sister said, 'look at that crazy boy. He can't talk.' Her sister replied, 'It is God's will.' In my opinion, it is not that children like this (with disabilities) trigger curiosity. The real problem remains the lack of sensitivity. Children with disabilities are considered crazy people who are unable to contribute anything to society. This perception is not based on fact, because the reality is that there are many people with disabilities today who occupy positions of responsibility in this country and around the world (p 48).

The stigma that a child with a disability is a burden or a curse is not only perpetuated in the family, but more often by the community. In addition, the community's general perception that a child with a disability cannot contribute to society leads to greater social exclusion, lower self-esteem, and lack of future aspirations. Due to fear of exclusion, community stigmatization, and a very real desire to protect their children, many of these children find themselves confined to their homes, as the administrator of PUC stated. The shift towards inclusion should not only be made in the schools, but also in the communities. This can begin within families of Senegalese children with disabilities by including their children in family activities, education, and community activities. These children need opportunities to come into contact with their non-disabled peers, so there can be a shift in attitudes and perceptions of individuals with disabilities (Porter, 1997).

Discussion

In 2000, Senegal adopted and pledged to meet the Education For All Framework goals by 2015. This means the country pledged to provide access to complete, free and compulsory primary education of good quality for all children, especially children with disabilities (UNESCO 2000). In addition, the Senegalese Parliament (Senate and National Assembly) passed the Law of Social Orientation on May 26, 2010. This law calls for providing children and youth with disabilities the right to a free education and the right to be educated in general school settings and attend schools located as close as possible to their neighborhoods (Republique du Sénégal, 2010). However, there are still major issues preventing children with disabilities in Senegal from attending an inclusive school.

The most pertinent step towards inclusion is to challenge negative attitudes towards individuals with disabilities. This starts with the family unit, and gains momentum in the school, which becomes the community center for awareness. An example of this is awareness campaigns which have shifted traditional attitudes towards epilepsy in developing countries, particularly Senegal, thanks to a global two-phase effort by the World Health Organization, International League Against Epilepsy (ILAE), and the International Bureau for Epilepsy (Reynolds, 2001). This same framework for community activism through international inter-agency support, community dialogue, grassroots efforts, and awareness campaigns, can be utilized with education and inclusion of children and individuals with disabilities. In fact, it would capitalize on awareness-building efforts previously implemented by disability advocacy organizations in Senegal. The success and sustainability of these efforts will rely on coordinated efforts across disability communities (e.g., deaf, physical disabilities, intellectual disabilities etc.).

As previously mentioned, children with disabilities who attend school with their non-disabled peers have higher self-esteem, increased peer acceptance, and academic gains (Salend & Garrick, 1999). However, this cannot be achieved if the school still stigmatizes a child with a disability. The more students with disabilities and non-disabled students come into contact with one another, the more likely they are to see similarities rather than differences (George, 2005). In order for inclusive education to be successfully implemented, effective teacher training, as well as appropriate and adapted instructional materials must be comprehensively addressed in schools. There needs to be a shift from the current teacher-centered pedagogy in Senegal to a pedagogy that is student-centered. Student-centered instruction is more conducive to an inclusive model of education. This approach highlights the child's ability, and helps to drive the development of curriculum and delivery (Aslett-Rydbjerg, 2003). Teachers must be trained to instruct a wide array of learners with different needs and skill sets. Teachers trained in inclusive practices can create a classroom that increases peer acceptance and richer friendships between students with disabilities and their non-disabled peers. Heterogeneous classrooms and differentiated instruction

must form the core of the classroom experience for students in a democracy that works (George, 2005). Increasing the physical accessibility of school building through simple adaptations to current infrastructures, such as ramps, or wider doorways, will increase accessibility for students that are confined to their homes and/or bedrooms.

Taking a family-centered approach is the only direction forward. Interviews and observations indicated that the financial impacts of having a child with a disability and enrolling them in schools are significant. Many parents of children with disabilities must stay home and care for their child. These parents are less likely to be able to work and participate in the labor market, contributing to increased poverty. Convincing parents to send their children to school rather than on the streets to beg for the family and providing them the financial support to transport their children and equip them with the necessary learning materials should be integral to any efforts to promote inclusive education.

Senegal has pledged to meet the Dakar Education for All goals by 2015. Although progress has been made towards educating girls and ethnic minorities, there is still a long way to go in regards to educating individuals with disabilities. It is difficult to accurately gauge the number of people in Senegal with disabilities, because so many are unregistered at birth, but based on the evidence we know this visible and invisible population is out there. An educational commitment by the government to this population is needed, not only in words but also in action. Educating students with disabilities together with their non-disabled peers in an inclusive environment will lead to a much needed community and societal attitudes shift. The public school should be the center of this shift, and classrooms should accurately reflect the population in the community.

References

- African Child Policy Forum. (2011a). *Children with disabilities in Africa: challenges and opportunities*. Addis Ababa, Ethiopia: Africa.
- African Child Policy Forum. (2011b). *Children with disabilities in Senegal: the hidden reality*. Addis Ababa, Ethiopia: Africa.
- African Child Policy Forum. (2011c). *The lives of children with disabilities: a glimpse into a hidden world*. Addis Ababa, Ethiopia: Africa.
- African Child Policy Forum. (2011d). *Educating children with disabilities: Central African Republic*. Addis Ababa, Ethiopia: Africa.
- Anastasiou, D. & Keller, C. (2011). International differences in provision for exceptional learners. In *Handbook of Special Education*, edited by J. M. Kauffman and D. P. Hallahan, pp. 773-787. New York, NY: Routledge.
- Aslett-Rydbjerg, C. (2003, November 13). *Inclusive education: early lessons learned from Senegal*. *L'Étude de Faisabilité - Éducation Spéciale et Intégratrice*, NDF, N° 306 Paper presented at the meeting of the World Bank, Washington D.C.
- Bah, A. (2011, May 23). Centre Talibou Dabo de Grand-Yoff : Les travailleurs n'ont plus que leurs yeux pour pleurer. Retrieved on November 27, 2011 from http://www.seneneews.com/2011/05/23/centre-talibou-dabo-de-grand-yoff-les-travailleurs-n%20ont-plus-que-leurs-yeux-pour-pleurer_7030.html.
- Baxter, P. & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544-559.
- Blunden, A. (1997). Vygotsky and the dialectical method. Retrieved on March 2, 2012 from <http://www.marxists.org/archive/vygotsky/works/comment/vygotsk1.html>.
- Boubacar, N. (2004). Innovation and reform to improve basic education quality in Senegal. Paper commissioned for the *EFA Global Monitoring Report 2005, The Quality Imperative*. Retrieved on December 4, 2013 from <http://unesdoc.unesco.org/images/0014/001466/146678e.pdf>.
- Fereday, J & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach to inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, 5(1), 1-11.
- Fortier, A. (2012). Dakar school integrates special needs children into regular classes. Retrieved on Dec. 18, 2012 from <http://www.voanews.com/content/dakar-school-integrates-special-needs-children-into-regular-classes-139570933/161682.html>
- Fontaine, A. (2010). Senegal: Children with disability – when stigma means abandonment. Retrieved March 13, 2011 from <http://www.irinnews.org/report/90139/senegal-children-with-disability-when-stigma-means-abandonment>

- George, P.S. (2005). A rationale for differentiating instruction in the regular education classroom. *Theory into Practice*, 44(3), 185-192.
- Gueye, H., Kane, L., Diop, B., & Sy, A.A. (2011). A review by AfriMAP and the Open Society initiative for West Africa. Retrieved on April 7, 2012 from <http://www.afriMAP.org/Report/Senegal%3A+Effective+Delivery+of+Education+Services>
- Hanass-Hancock, J. (2009). Disability and HIV/AIDs – a systematic review of literature on Africa. *Journal of the International AIDS Society*, 2(13), 9.
- Handicap International (2010). Guide de poche sur la législation due handicap au Sénégal. Retrieved on November 23, 2013 from http://proadiph.org/IMG/pdf/guide_legislation_senegal_broch.pdf .
- Hitchcock, C., Meyer, A., Rose, D. & Jackson, R. (2002). Providing new access to the general education curriculum: Universal design for learning. *Teaching Exceptional Children*, 35, 8-17.
- Kumar, S. (2013). Condemned to beg? Forging new futures for Senegal's disabled population. Retrieved on July 7, 2013 from <http://www.theguardian.com/global-development-professionals-network/2013/jun/10/new-futures-for-senegal-disabled>.
- La Direction de la Planification et de la Réforme de l'Éducation (DPRE) (2004). *Le développement de l'éducation: Rapport national du Sénégal*. Dakar, Senegal: Senegalese National Government, Ministry of Education.
- Porter, G.L. (1997). Critical elements for inclusive schools. In S.J. Pijl, C.J.W. Meijer & S. Hegarty (Eds), *Inclusive education: A global agenda* (pp. 68-81). New York, NY:Routledge.
- Republique du Sénégal (2010). *La loi d'orientation sociale*. Dakar, Sénégal: Secretariat Général du Gouvernement.
- Reynolds, E.H. (2001). ILAE/IBE/WHO global campaign “out of the shadows”: global and regional developments. *Epilepsia*, 42(2), 1094-110.
- Ruijs, N.M., Van der Veen I. & Peetsma, T.D. (2010). Inclusive education and students without special educational needs, *Educational Research*, 52(4), 351-390
- Shiohata, M. (2009). Exploring literacy and growth: an analysis of three communities of readers in urban Senegal. *International Journal of Educational Development*, 29, 65-72.
- Sip, J.P. & Meijer, C.J.W. (1997). Factors in inclusion: a framework. In S.J. Pijl, C.J.W. Meijer & S. Hegarty (Eds), *Inclusive education: A global agenda* (pp. 8-13). New York, NY: Routledge.
- Srivastava, P. & Hopwood, N. (2009). A practical iterative framework for qualitative data analysis. *International Journal of Qualitative Methods*, 8(1), 76-83.
- Sullivan Palincsar, A. (1998). Social constructivist perspectives on teaching and learning. *Annual Review of Psychology*, 49, 345-375.
- United Nations (2009). “Addressing the energy challenges of the 21st century together. The Africa-EU Energy Partnership”, EU; “*The Millennium Development Goals Report*”. Retrieved on 10/16/13 from http://www.east4south.eu/index.php/eu_and_development/4_development_issues_in_sub-saharan_africa.
- United Nations Education, Scientific and Cultural Organization. (5-9 March 1990). *World declaration on education for all: Framework for action to meet basic learning needs*. New York, NY: UNESCO.
- United Nations Education, Scientific and Cultural Organization. (26-28 April 2000). *The Dakar framework for action, education for all: meeting our collective commitments*. Paris, France: Europe.
- Van Fleet, J. W., Watkins, K., & Greubel, L. (2012). Africa Learning Barometer. Retrieved from <http://www.brookings.edu/blogs/education-plus-development/posts/2013/05/28-quality-education-sub-saharan-africa-mwabu-ackerman> on October 17, 2013.
- World Bank (2013). Addressing the energy challenges of the 21st century together: The Africa-EU Energy Partnership: The Millennium Development Goals Report. Retrieved on October 10, 2013 from http://www.worldbank.org/content/dam/Worldbank/document/Africa/Report/Africas-Pulse-brochure_Vol7.pdf.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd Ed.). Thousand Oaks, CA: Sage.
- World Health Organization. (2011). *World report on disability*. Geneva, Switzerland: WHO Press.