

The Pre-University Experiences of Students with Disabilities in Barbados and Trinidad

Stacey Blackman,
School of Education
University of the West Indies, Cave Hill Campus
Wanstead, St. Michael
Stacey.blackman@cavehill.uwi.edu

Dennis A Conrad,
School of Education and Professional Studies
State University of New York, Potsdam College
Conradda@potsdam.edu

Lisa Philip
University of the West Indies, Open Campus
Trinidad and Tobago
Lmphilip23@gmail.com

Abstract

This retrospective qualitative research utilised ecological systems theory and content analysis to explore the pre-university experiences and barriers to participation faced by students with disabilities in Barbados and Trinidad. Findings suggested that attitudinal and environmental

barriers heavily influenced the level of participation of students with disabilities at secondary school. In particular, the nature of social interactions in the micro and meso systems exerted a powerful influence on teacher-student and peers with and without disabilities' relationships.

Teacher and peer interactions oscillated between being accommodating and conflictual.

Implications suggest the need for more teacher training in inclusive practices and support to remediate dysfunctional relationships between students with disabilities, their teachers and peers at secondary school.

Keywords: Caribbean students with disabilities, barriers to participation, inclusion, secondary school, ecological systems theory

Introduction

According to research by Newman and Madaus (2015) and Coster, Law, Bedell, Liljenquist, Kao, Khetani & Teplicky (2013), the participation and accommodation of students with disabilities at secondary school remain understudied at the international level. It is more common to find recent literature that examines barriers to participation experienced by students with disabilities at the tertiary level (Babic & Dowling, 2015; Hong, 2015; Moola, 2015; Strnadová, Hájková & Květoňová, 2015) or primary school (Eriksson, Welander & Granlund, 2007; Law, et al., 2006).

Participation is a multidimensional concept captured within the World Health Organization's (2001) bio-psychosocial model of disability or the International Classification of Functioning, Health and Disability for Children and Youth. This model loosely defines participation as engagement in everyday activities. Researchers like Eriksson and Granlund (2004a) have refined this definition and note that participation consists of three interrelated components: (a) activity, (b) feeling of participation, and (c) context. By extension, barriers to

participation are anything that prevents a person from engaging in everyday activities within a specified or given context.

The type of barriers most frequently cited in the literature are: physical, architectural, information or communication, technological, attitudinal or, a policy or practice that imposes barriers (Babic & Dowling, 2015; Hong, 2015; Moola, 2015; Strnadová, Hájková & Květoňová, 2015; Pivik, McCommas and LaFlamme, 2002). Most of these tend to impede access to learning, the curriculum, and extra-curricular activities within the teaching-learning environment (Ontarians with Disabilities Act, Ministry of Citizenship, 2001). Research by Coster, et al., (2013) documented ratings from parents of children with disabilities in the USA and Canada about the barriers to participation that their children encountered in school settings. Parents noted that their children were less involved with their non-impaired peers at school clubs, organizations and school activities. They also cited physical and social barriers to participation as the main reasons for their children's lack of involvement at school. This finding mirrors early research by Pivik, McCommas and LaFlamme (2002) in Ottawa, Canada with children with physical impairments like spina bifida and cerebral palsy. Their research classified barriers to participation as environmental, attitudinal, and related to the nature of the students' impairment. Students' narratives distinguished between intentional and unintentional attitudinal barriers. The former referred to instances of isolation, physical and emotional bullying like being called names, and difficulty forming friendships with peers. Unintentional barriers, on the other hand, referred to teachers' and other support staff's lack of knowledge, ignorance, understanding, and effort. Teachers exhibited a lack of knowledge in the assignment of appropriate work for students with disabilities, a lack of adaptation of physical education activities to facilitate the participation of students and the assignment of students as teacher helpers in the classroom (Pivik, et al., 2002).

The importance of hearing the voices of students with disabilities gained prominence in the 1990s and continues to the present day (Messent, Cooke & Long, 1999; Kiernan, 1999; Eriksson, 2005; Valchou & Papananou, 2014). Currently, more studies employ qualitative approaches to data collection. These facilitate a richer sharing of the voices and experiences of students with disabilities in regular education settings (Eriksson, 2005) and focus more on the participation of these students. Added to this, is the use of retrospective studies to understand the schooling experiences of persons with disabilities and the accounts of adults with disabilities. Some researchers who utilised retrospective studies to document the experiences of students with disabilities include Valchou and Papananou (2014) in Greece; Harrington (2014) in Australia; Angelides and Aravi (2006) in Cyprus and Kluwin, Stinson, & Colarossi (2002) in the USA. Valchou and Papananou (2014) for example examined the narratives of students with disabilities who attended higher education institutions in Athens. The findings of this study mirrored those of Angelides and Aravi (2006) and Kluwin, et al., (2002), which revealed that teacher-student interactions oscillated between accommodation and discrimination. Negative teacher-student interaction manifested itself at all levels of the school vis-a-vis academic, social and environmental. At the academic and social levels, participants experienced prejudice, lack of differentiation of curriculum, and teachers' failure to provide instructional support. Students also felt that their psycho-social needs were not met and felt alienated and ignored at school. At the environmental level, participants with physical impairments experienced a lack of autonomy and felt unsafe because of the architectural inaccessibility of the school environment.

Ecological Systems Theory

A dynamic view of environmental systems is needed to explain how students with disabilities perceive their interactions with peers, teachers and their schools. Our research draws on Urie Bronfenbrenner 1979 bio-psychosocial model that described a series of bi-directional influences between the individual and the environment. This theory suggests that the

environment is a set of nested concentric circles that comprise of the micro, macro, meso, exo and chrono systems, with the child or individual at the centre.

The micro and meso systems contain the most critical set of proximal influences that include the child's family, child rearing practices, close friends, teachers, and the school (Bronfenbrenner 1979). Interactional patterns in this layer are bidirectional, reciprocal, and experienced more acutely between the individual and other significant adults for example teachers. Supportive settings represent one of the more distal influences in the exo-system Bronfenbrenner (1979) and access to provision of services here for example technology, transportation, or academic support influenced students' psycho-social and academic adjustment. The outermost level of the system is the macro system that refers to the values, laws, customs, and culture of a place (Bronfenbrenner 1979). At the school level, this might include administrative regulations, rules, and customs that influenced both the implementation and enforcement of policies related to inclusion, type of support accessed and the accommodation of students with disabilities. The chronosystem lies at the periphery of the ecosystem, it is temporal and comprises of life events that influence development across the lifespan of an individual (Berk, 1989). Changes can be imposed on the individual from external forces or arise equally from within the person since people are both products and producers of their own experiences within various settings.

The Schooling Experiences of Students with Disabilities in the Caribbean Context

The Barbados Context

Barbados is the most eastern island of the Caribbean archipelago and is 166 square miles. The island's education system is compulsory for students between the ages of 5 to 16 years old and is tiered to reflect the spectrum of service delivery options available to meet the

diverse needs of students. These are pre-primary, primary, special education, secondary schools and tertiary level of education.

Primary education caters to students from the ages of 5 to 11 years old, and there are 96 schools within this tier that serves over 20,000 students (Ministry of Education, 2013). Students complete four years of school and then sit the Secondary School Entrance Assessment (SEA) to gain entry into secondary school. According to the 2013/14 statistical digest, Barbados has seven service delivery options that serve 599 students with special needs (Ministry of Education, 2013). These include special education schools for students with intellectual impairments, developmental disabilities and those with sensory impairments, Autism, and Attention Deficit Disorders and special education units. Special units are either separate buildings or classrooms that share the same physical spaces as regular education schools but serve a smaller population of students who need individualised instruction. Secondary education caters to children from the ages of 11 to 16 and mirrors the British education system. Students in their senior years at secondary school, that is, between their fourth and sixth year of schooling take the Caribbean Secondary Education Certificate (CSEC) and Caribbean Advanced Proficiency Examinations (CAPE) across a number of subject areas to gain entry to tertiary level institutions. There are 36 secondary schools that serve a population of over 20, 000 students (Ministry of Education, 2013). The final tier of education is at the tertiary level, and there are three public institutions at this level including a regional university, teachers' college and local community college. Other post-secondary options available to students in Barbados includes a technical vocational institution that offers a number of courses to develop the skills of students in non-academic disciplines.

The Trinidad Context

Trinidad is the larger of the twin island republic of Trinidad and Tobago. It is

5,131 square kilometers or 1,981 square miles. As Barbados, education is free and compulsory

from 5 to secondary (high) school. While not compulsory, participation in preschool education

is the norm starting at two years. The education system comprises preschool, elementary or

primary, secondary and upper secondary, and tertiary levels.

Students have seven years of primary education classes beginning with First Year and ending with Standard 5. 'Standard' in this context is equivalent to 'Grade 1' at the international level. During the final year of primary school, namely Standard 5, students take the Secondary Entrance Assessment (SEA) which determines their secondary school placement.

Secondary school education continues for at least five years. It leads to the Caribbean Secondary Education Certificate (CSEC) examinations. Students with satisfactory grades may opt to continue their secondary education for a further two-year period, leading to the Caribbean Advanced Proficiency Examinations (CAPE). Both CSEC and CAPE examinations are administered by the Caribbean Examinations Council (CXC).

At tertiary level, there are four main higher education institutions, including three universities along with a myriad of other public and private institutions. Tuition costs are provided for via The Government Assistance for Tuition Expenses program (GATE) up to the level of the bachelor's degree. Some Masters' level programs are subsidized.

Education for students with disabilities, also known as Special Education, continues to be in a state of transition from the traditional special school's system to more inclusive settings. Internationally, inclusion is an approach to education reform aimed at providing appropriate and seamless education from early childhood to tertiary levels.

There are approximately four hundred and eighty (480) primary schools and one hundred

and forty (140) secondary schools in Trinidad and Tobago (Trinidad and Tobago National Task Force on Education, 1994).

Research on the schooling experiences of students with disabilities is still an emerging field in the Caribbean. To date, Blackman (2010; 2011) has documented the academic experiences of students with dyslexia in Barbados. This research employed a multiple case study strategy and qualitative design to capture the experiences of this group of students in the Caribbean. Findings from these studies not only add to the international pupil perspective and voice research literature, but they also serve as a reminder of the efficacy of this type of research to inform teachers' pedagogical decisions. Blackman (2010) for example challenged ideas about teachers only utilizing heterogeneous groupings of students for instruction while ignoring the social and cognitive benefits to be derived from homogeneous groupings and friendship dyads. Also, Blackman (2011) established that students with dyslexia benefited from a range of regular teaching strategies such as more detailed explanations, demonstrations, drama and role-play, storytelling, and inquiry-based learning. This research challenged notions that only specialist and individualized approaches to instruction worked for these students.

More recently Conrad, Blackman, and Philip (2015) conducted a qualitative study that employed an interview strategy to enquire into the barriers to participation experienced by a group of university students in the islands of Trinidad and Tobago and Barbados. This followed calls by Law, Petrenchik, King and Hurley (2007) at the international level to understand how students with disabilities experience barriers to participation within and across various social, cultural and environmental contexts. In this first study, we described the experiences of university students and found that the main barriers to participation experienced by them were contextual and personal in nature. Students expressed concern about the lack of equality of opportunity, institutional barriers to inclusion, lecturers not being familiar with how to meet their needs and challenges navigating the environment for those with physical impairments. When

students adopt an attitude of self-actualization buttressed by supportive relationships contained within the micro, meso, and exo systems, then barriers can be circumvented.

Our research also collected information on their experiences in society, at secondary school, and at work. The current study looks at the data collected retrospectively on their earlier secondary schooling experiences. The research questions are:

1. What barriers to participation were experienced by students with disabilities at secondary school?
1. How can secondary schools better include students with disabilities?

Methodology

We used a qualitative research design to document the experiences of students with disabilities at the University of the West Indies, Cave Hill (UWICH) and the University of the West Indies, St. Augustine (UWISA) campuses. We used an in-depth interview strategy and an interpretative framework (Denzin & Lincoln, 2005) to engage in dialogue with students and co-construct knowledge about the meanings that participants gave to their unique experiences.

Measures

We formulated an in-depth structured interview guide to collect data in a standardized format across participants at the two campuses. The protocol collected: (a) Demographic information on the age, sex, nature of the participant's impairment, interests and education qualifications; (b) Perspectives of participants as to the barriers faced at secondary school. According to Robson and McCartan (2016), the employment of structured or systematic interview protocols increases the comparability of responses across participants and assist in uncovering and unpacking participants' perspectives, thoughts, attitudes, and opinions about a phenomenon or issue (Flick, 2006).

Questions on barriers to participation in school captured the unique experiences of persons with various types of impairments. Examples of questions included: (1) How difficult was it for you to get around at your school? and (2) Can you tell me if you participated in physical exercise and sporting activities and how did school help you to do this?

The Participants

Our sample comprised of 12 undergraduate students (4 Males and 8 Females) from Barbados (6 students) and Trinidad (6 students). Table 1 presents the demographic information for the sample.

Table 1. Demographic Information of Participants

Name	Sex	Age	Marital Status	Disability
Shannie ^a	F	21	S	Attention Deficit Hyperactivity Disorder
	F	19	S	Deaf
Sandra ^a	F	26	S	Neurological Disorder (Cerebral Palsy)
Crystal ^a	F	28	S	Genetic Disorder
Shea ^a				
Shawn	M	24	S	Deaf
	F	29	S	Neurological Disorder (Cerebral Palsy)
Rene ^b				
Josie ^b	F	19	S	Neurological Disorder (Cerebral Palsy)
Terry ^b	F	33	S	Health and Sensory Impairment
Althea ^b	F	23	S	Apergers
Jason ^b	M	21	S	Dyslexia
Jacob ^b	M	23	S	Attention Deficit Disorder
Kirk ^b	M	21	S	Physical Impairment

Note. Health Impairment means having limited strength, vitality, or alertness which adversely affects a child's educational performance which is due to chronic or acute health problems such as asthma, attention deficit disorder or attention deficit hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, sickle cell anemia, and Tourette syndrome. Individuals with Disabilities Education Act of 2004, 300 § A, 300.8

aUWI students at Cave Hill bUWI students at St. Augustine

Procedures

. Participants were recruited for the study through the Office of Student Services at UWICH) and with the support of Academic Support Disabilities Liaison Unit (ASDLU) at UWISA). Officers in charge of the OSS canvassed students with disabilities using word of mouth, telephone or as walk ins and informed them about the study and its objectives. The criteria for involvement were that students needed to possess a physical, learning, sensory or health impairment and enrolled in a course of study at the university level. The Office for Student Services then contacted us by email informing us of persons interested in participating in the study. We gained participants' consent and briefed them about the study by utilizing an informed consent form that outlined the purpose, duration, procedures of the study, risks and benefits, and a statement of confidentiality. We followed ethical guidelines outlined by the Institutional Review Board of the University of the West Indies. The Board approved our informed consent form, and we informed participants that they could exit the study without any adverse implications for their academic achievement.

Interviews took place in a quiet location at the Office of Student Services or classrooms on both campuses and lasted for approximately between 30-45 minutes. We debriefed students, and collected outstanding informed consent forms. Students were invited to verify the accuracy of the transcripts once transcribed and addressed any errors found in the documents.

Analysis

Data were analyzed, using content analysis associated with the grounded theory

tradition (Glaser& Strauss, 1967). The first two principal researchers were mainly responsible for the analysis of transcripts, while the third researcher transcribed the interviews and prepared them as electronic files. The first researcher used open coding from three Barbados transcripts to produced an in vivo coding scheme (Saldaña, 2015) or list of possible codes (Miles & Huberman, 1994). In vivo codes for example “TEACHER DIDN’T LOOK AT ME” “TEACHER IGNORED ME” served to guide not direct the analysis of data. A Google doc was produced which aided to discuss the reliability of coding after the second principal researcher completed independent coding of transcripts.

Open Codes were then recorded into subcategories to further unpack their meanings, for example, ‘Ignored’, ‘Accommodated,’ and ‘Imposed’ which described the nature of the interaction between teachers and students in school. Axial coding (Strauss, 1987) ‘lumped’ subcategories into larger units like ‘Teacher-Student Interactions. Dimensions captured opposing views in the data for example; axes for Teacher-Student Interactions were ‘encouraged-ignored-imposed’. Analytic memos were also used reflexively to document the researchers’ ideas about the meanings of codes, the representation of participants’ experiences and any biases imposed on the data. We ensured the trustworthiness of the data by using member checking to ensure the authenticity of the data collected Mertens and McLaughlin (2004). Participants read or listened to and verify the accuracy of the transcripts and analysis. We also triangulated data collection across multiple participants to ensure consistency in the way interviewers used the protocol (Trainor & Graue, 2013).

Findings

Four themes emerged in this study. These are: (1) “I like when you encourage rather than ignore or limit me”; (2) ‘Better interaction means partnering with peers and not being picked on’; (3) ‘Adjusting to school means adjusting the environment to suit my needs’; and (4) ‘Including me means providing opportunities and access for my success’.

Research Question 1: what barriers to participation were experienced by students with disabilities at school?

Our findings suggested that students with disabilities in Barbados and Trinidad encountered barriers to participation at secondary school. However, this is not to suggest that all persons in the study experienced difficulties navigating school, in fact, some participants recounted positive memories of their experiences at school and we provide examples that reflect such in the students' narratives.

The main barriers to participation identified by students were interpersonal and environmental barriers. The students' narratives revealed that interpersonal conflicts with teachers and peers threatened their emotional stability and academic participation. The theme "I like when you encourage rather than ignore or limit me" captures the multi-dimensional nature of these interactions. When teachers ignored students, it produced conflict and exclusion which did not meet the affective needs of students. Ignoring had an active (denying opportunities and exclusionary practices) and passive (not acknowledging the presence of the student, lack of knowledge) component while the imposition of authority limited participation.

Many of the Barbadian and Trinidadian students interviewed noted that relationships with teachers were difficult at secondary school. It was a challenge when teachers possessed little knowledge of the nature of the student's impairment and the accompanying limitations associated with the disability. One female student self-identified with Asperger's Syndrome from Trinidad who struggled with her socialization skills, noted that 'I know of a [teacher] back in high school was doing her best to help me, but she didn't know how and what she did was counterproductive because it singled me out and disoriented me' [Althea/ Female/Aspergers/ TT]. She noted how the teachers attempted to use paired approaches to learning to help her build better social skills. She stated that

She had me switch seats with everyone in the class once a week, which gave me trouble in the class because, of course, people sit by their friends and they did not appreciate having that disruption and it also disrupted me. She was only trying to do what she could without knowing what to do because they didn't tell her. [Althea/ Female/ Asperger's/TT].

Althea's account provides a poignant example of how teachers struggle to include and group students with Asperger's for instruction. Through her narrative, Althea struggled to find her place on a weekly basis through 'switching seats' which only disrupted established friendships in the classrooms and perhaps incurred a sense of resentment from peers as Althea noted it 'gave her trouble in class' and left her feeling 'singled out and disoriented'. The literature on effective instructional practices for students with Asperger's Syndrome suggests that changing seating arrangements can accrue social benefits once done unobtrusively or when done for the entire class (Dugan, et al., 1995; Safran, 2002). Safran argues that teachers can assign particular tasks aligned with the strengths of the student and provide opportunities for the student to be successful in peer activities.

Students with physical impairments also provided accounts of how schools and teachers limited their participation. Out of four students with a mobility impairment at least, two students noted that the school administration did not make provisions for classes to be located on the ground floors. In particular, architectural barriers like no elevators to the top floor of the school posed an additional challenge since it meant that students with physical impairments needed more time to transition to classes on the upper floors of the school. Some teachers seemed to expect students to arrive for classes in a prompt manner in spite of the inaccessibility of the class from the ground floors. A typical comment is provided by Josie a student with a disease that affected her muscles. She noted that:

. . . this . . . time, it was IT [information technology] and the teacher's class was on the top floor of the library. I had to come down from the very top of the building all the way to the bottom to [and then to] go back up and reached five minutes late. I go in the classroom and the [IT teacher] is like . . . what time is it Josie? And I [told] her the time. And she said 'ya know ya late? She [said] I can't come in the class because I'm late and I had to go back out.

Crystal's narrative also offered a similar experience to that told by Josie. She noted that:

While I was at [names school], there was this teacher that made me walk up the stairs to be able to attend class because she thought it would be good for my muscles or therapeutic (sic). At the time I didn't share it with anyone because I needed to do the subject.

Both Josie and Crystal's narratives are insightful and illustrate the struggle that teachers have between fostering a sense of responsibility in all students and having a regard to the limitations imposed by the nature of students' impairments, lack of accommodation and accessibility to classes in the school. These teachers believed that they were helping students by not treating them differently from their peers. The consequences for both Josie and Crystal were that they had to accept their teachers' decision, were denied access from class and struggled to function with limited mobility as Crystal noted 'I needed to do the subject'.

However, not all accounts were as disparaging as those noted above. In fact, other students with physical impairments from Trinidad had positive and encouraging relationships with their teachers. Some examples of such included an account from Rene, a student with cerebral palsy who described herself as an independent person. She emphasized that teachers were often concerned that she had to climb flights of stairs at secondary school to reach her classes.

I had to climb stairs almost every day because sometimes classes was on the third floor at secondary school. Teachers were a bit concerned about me having to climb all those

stairs. But again, I am a very independent person, so it wasn't a challenge for me. [Rene/Physical Impairment/TT]. A male student from Trinidad described his relationship with teachers as "teachers understood [his impairment]" [Kirk/ TT/ Physical Impairment] Architectural barriers to participation are frequently cited in the literature (Pivik et al., 2002) as a hindrance for students with disabilities. Our findings suggest that students in Barbados and Trinidad experienced similar difficulties. However, these accounts are reminiscent of Eriksson & Granlund (2004a) arguments that participation consists of three interrelated components. These are (1) activity; (2) feeling of participation and (3) context. The structure of the learning context and unsympathetic teacher attitudes excluded many students from participating in learning activities.

Perhaps the most poignant and extreme accounts of conflictual teacher-student interactions came from students who are Deaf in Barbados. They recalled instances of being ignored and limited at school. Sandra is a female student who is Deaf and one of the few students from a special school to participate in an inclusive education programme between a special and mainstream school. The programme exposed Sandra to the regular education curriculum while still maintaining links with her special education school to boost her sign language skills. A teacher who signed and interpreted for the Deaf accompanied her while she was at primary and secondary school. Sandra noted that relationships with regular education teachers did not pose any significant issues except at secondary school where she noted that 'there were [a] few problems with some teachers'. In fact, she experienced the more passive form of ignoring i.e. not being acknowledged by the teacher. When probed further about her relationship with teachers, she recalled how one teacher in her senior year at secondary school ignored her when she was preparing for Caribbean Examinations Council Exams [CXC]. She shared:

When I was getting ready for CXC and then all of a sudden near term, the teacher would [ignore] me. [She] would sit and purposely ignore me. Then, she would tell [the

interpreter] to take me to the library all the time. I sat down and waited and waited for a long time for the [interpreter] and I was totally lost in the class. The class teacher would sit and look at me, and I would look at her. [Sandra/Female/Deaf/Barbados]

When asked whether or not the relationship with the teacher improved Sandra noted:

It's more difficult for me to approach her in a way. She is *always* purposely ignoring me, continuing in a way that nobody would recognise. [Other] people don't see it but me. I don't expect that people would believe if I tell them about what is wrong.

Sandra's narrative amplifies the challenges in communication experienced by many students who are deaf in classrooms with hearing peers and teachers. It is easy to experience a feeling of being 'lost in the class'. Sandra recalls how the teacher projected her sense of helplessness to communicate 'she was in a bad mood' and 'you need to go away' onto her and how it led to her exclusion from the classroom when she was sent to the library. For Sandra, she too was helpless to change the teacher's disposition and advocate for herself. Her statement 'I don't expect that people would believe if I tell them,' is an indication of her acceptance that this is inevitable.

Shawn provided an example of how teachers' imposed their authority onto students who are Deaf. He attended the same school as Sandra and described students' social and academic interactions with teachers this way:

I did have some challenges, and the teachers did think that they were better than us and they would demand and command things of us. I wasn't comfortable with them. I would feel uneasy and I would feel insignificant and ashamed [Shawn/Male/Barbados/Deaf].

This comment reveals how this student felt about the affective climate of the school and the nature of social interaction between teachers and students who are deaf. The affective and cognitive climate of classrooms are important, and this could lead to disengagement and withdrawal if students do not feel supported and valued by teachers in their classrooms.

He also recalled how teachers at the school sought to involve the students in extracurricular activities. He shared:

The teachers there would encourage the deaf to get involved in signing [sign language] and drama. The deaf [students] would not want to get involved, so they [teachers] decided that they would choose for us . . . compel us to get involved. We felt uneasy about it. So we just did it because we didn't have a choice. [Shawn/Male/ Barbados/Deaf]

Shawn's story is unique in its description of how teacher-student interactions and relationships could be unevenly balanced. The picture he paints is one of heavy imposition of authority by teachers as they attempted to involve students in the extra-curricular activities at the school. The lack of co-agency produced a feeling of powerlessness according to Shawn, 'we didn't have a choice'. For both Shawn and Sandra, the psycho-social consequences of not being able to use their voice to express their dissatisfaction at their circumstances resulted in a feeling of insignificance.

The narratives above suggest that some students felt powerless at secondary school to change their circumstances and negotiate the power dynamics of the classroom between teachers and themselves. For students who are deaf, powerlessness was linked to their inability to speak and give voice or advocate for a change in circumstances, which they felt, was unfair. For those students with physical impairments, they experienced a sense of powerlessness to change the location of their classes so that it did not result in them getting to classes late. For students like Althea, her sense of powerlessness related to not fitting into the teacher's assigned seating arrangements with other peers in the classroom. The consequences of powerlessness were that students with disabilities felt isolated, disoriented and resigned to accept circumstances that often led to their exclusion from participating like their peers who are not disabled at secondary school.

While it is tempting to argue that this work supports the negative hypothesis (Fink, 1977), that students with disabilities are more likely to experience poorer social and academic relationships with teachers and peers, one needs to look at factors that might account for such circumstances. These findings are not surprising as many studies for example Valchou and Papananou (2014); Pivik, et al. (2002); Brown, et al., (2003) reported both negative and positive interactions between teachers and students in their studies. Research also supports students' explanations of their teachers' behaviours based on a lack of knowledge (ignorance) of the nature and needs of students' impairments and teachers' attitudes towards students with disabilities that intentionally and unintentionally sometimes led to their exclusion and isolation in the classroom (Valchou & Papananou, 2014).

Theme: 'Better interaction means partnering with peers and not being picked on'

This theme suggests that peers also played a key role in determining how well students with disabilities participated in their school environments. Both friendly and unfriendly interactions occurred between students with and without disabilities. Friendly interactions emerged when students with disabilities experienced a sense of affiliation, connection, and cordial relationships with peers. By contrast, physical and relational aggression towards peers were unfriendly interactions. It is interesting to note that females more so than males in the study experienced being bullied by their peers in both Trinidad and Barbados.

Peers who were convivial assisted students with disabilities in some ways: they lip read, looked out for each other, shared jokes and accepted their counterparts with disabilities. Josie recalled an experience during a period of orientation to familiarize her with the school environment. She noted that students found it easy to accept her.

My aunt was a teacher, and I went to the school [where] she was teaching. Basically, before I even enrolled in the school, I was there . . . [informally] like in the system, in the classroom and being exposed to everything. Everybody was accustomed to me being

there... We were quite close. In fact . . . they didn't shy away from me or anything like that. [Josie/Female/Physical impairment].

For Josie, close contact with peers facilitated pro-social behaviours and interactions with other students at the school so that she found it easy to experience a sense of belonging in the school as she notes "everybody was really accustomed to me being there."

Shawn recalled how good he felt that being in the company of other students who are deaf like himself. He indicated that he felt connected to them. "I was comfortable at [names school for the deaf] in the sense that I had a natural connection with the deaf".

By contrast, many female students experienced acts of aggression and bullying from peers that often had negative psychological consequences. Physical forms of aggression included: being bullied, being picked on, having things taken away, being teased and being nicknamed. Relational forms of aggression included spreading rumours and being discriminated against. Seven of the students interviewed experienced physical forms of aggression at secondary school.

Sandra noted one of the more extreme accounts of bullying. She recalled how some students did not believe that she could not hear and wanted to 'test her hearing' to see if she was indeed deaf.

One girl, I do not know if she was just trying to test to find out if I can hear, walked around and shouted in my ear. And, I get [got] angry, ready to grab her hand but [names student] told me 'don't touch her'. [Then] she does it again and then again and I grabbed her hand. [She said] 'Wait, you can hear me?' [Sandra/Female/ Deaf/Barbados].

For Sandra, it was difficult to bond with peers who did not understand the nature of her impairment and this testing of her hearing was perhaps an attempt to see if she was 'normal'. Sandra's response 'I get angry', and 'I grabbed her hand' reveals that she was not going to condone the injustice of being bullied because of her impairment. She was prepared to defend herself like any 'typical' child would, who was experiencing bullying behaviour from peers.

Sandra also recalled when she stopped using her voice at secondary school because students made her 'feel bad'.

I used my voice a little and the children would tease me about my voice . . . but then the teasing continued on and on. I got tired. It made me feel bad, so I said nothing. I stopped using my voice there. [Sandra/Female/ Deaf/Barbados].

Through these words, we see how this student attempted to gain entry and social acceptance with peers at school. In the classroom, her primary mode of communication was through her sign language interpreter, but within the social context of peer relations, she wanted to use her voice to connect with peers. That she chose not to use her voice because she was teased and 'made to feel bad' is an indication that she was resigned not to become part of a peer group that did not value her as an individual.

Students with physical impairments also provided similar instances of teasing as their peers who are Dead. For example, Martha recalled how boys called her names.

At school, I remember I went through a lot emotionally. I think that is where my self-esteem was damaged because as I said, I was tall. [Names impairment] means that you're tall and slim.

My nickname at school was Olive [as in the cartoon character in Popeye], I was called bony macaroni, I was called spaghetti . . . the boys would be like 'bony macaroni, bony macaroni, bony macaroni.' [Martha/Female/Physical Impairment/Barbados].

And Rene, a student with cerebral palsy noted that, 'Secondary school was a whole different ball game. Students because of their lack of knowledge and understanding, I was teased, I was harassed.' [Rene/ Physical Impairment/ Trinidad]

These accounts of teasing noted by Sandra, Martha, and Rene all occur in the foundational layers of the micro and meso systems, and they also provide an indication of how challenging it is for students with disabilities to negotiate acceptance and experience a sense of

homophily among peers within this layer. As Rene indicated, a lack of knowledge and understanding of the nature of students' impairment produced social barriers to participation for these students among their own peer group and this, in turn, did not augur well for the emotional well-being of students with disabilities at secondary school.

This is a common finding in the international literature. For example, Koster, Pijl, Nakken and Houten (2010) noted that students with disabilities tend to find it difficult to develop friendships with peers, experience bullying (Rose, Swearer & Espelage, 2012) or just find it difficult to fit into regular education settings (Valchou & Papananou, 2014). These findings are also mirrored in this research in Barbados and Trinidad among participants who reported that relationships with peers vacillated between periods of conviviality and aggressiveness.

The findings here also captured the challenges associated with establishing propinquity and homophily between heterogeneous groups of students at secondary school. In particular, social inclusion becomes even more difficult when students do not share the same mode and system of communication as is the case with students who are deaf and their peers who are not disabled. It is the same with students with Aspergers Syndrome who do not process the semantics of the English language in the same way as their non-disabled peers. They too, find it difficult to be socially included in schools. It is therefore not surprising that these students often feel isolated and unconnected from their peers and school settings (Weiner, Day & Galvan, 2013).

Theme: 'Adjusting to school means adjusting the environment to suit my needs'

The participation of students with disabilities depends on how well schools are able to accommodate the physical needs of students. In the study, adjusting to school means that the exo system environmental layer needed to be modified to accommodate the students' learning and the dimensions here included either flexible or inflexible accommodations. Flexible as opposed to inflexible accommodations included the inclusion and use of technology in classrooms and by schools to include students in the life of the school. Josie noted how her school modified the

bathroom so that she could access it. "They had to remodel the whole bathroom. They put in the doorway, the government had to construct a wide angle ramp . . ." [Josie/ Female/Physical Impairment/Trinidad]

By contrast, some students noted that schools were inflexible and not as accommodating with regards to meeting their needs. One student recalled how the location of classes in Information Technology influenced her choice of school subjects because the IT room was not accessible to her from the ground floor of the school. Crystal a student with CP noted:

There was this one time that I can really remember that was an inconvenience. I wanted to do IT [information technology] but that was on the top floor of one of the buildings, and I had to end up choosing Art instead. [Crystal/ Physical Impairment/Barbados].

Sandra provides another account of how schools did not meet the needs of students. She recalled when she was at morning assembly and 'felt left out' because the school did not have close captioning.

Most of the time there is a problem [participating in morning assembly] because when you watch the television in the hall there is no close captioning and then I would have to search and remind them that I am here, and I would feel left out. Sometimes, they would have it with a captioning, and then it would be good. [Sandra/Female/Deaf/Barbados].

The comments from Josie and Sandra illuminate how easy it is for the environment to exclude them and not meet their needs. For Josie, she experienced an architectural barrier in her environment that denied her access not only to the class she wanted to do, but more importantly, in the choice of subjects that were available to her. In Sandra's case, she experienced a feeling of isolation from her surroundings when the school did not provide close captioning and this limited her ability to participate in the morning ritual of full assembly.

Although contextual barriers in the exo system layer presented barriers, participants' narratives revealed that technology was the best way to facilitate inclusion. Research at the

international level by Lidström and Hemmingsson (2014) found that students with physical, hearing and visual impairments benefited for example from the use of information and communication technology. In particular, it improved the students' ability to function in school by compensating for difficulties associated with the nature of their impairments. Moreover, the need to adjust aspects of the school environment to suit the unique needs of students with impairments are also congruent with other studies on barriers to participation of school-aged students with disabilities at the international level by Hemmingson and Borell (2002).

Research Question 2 asked: How can schools include students with disabilities?

The theme 'Including me means providing opportunities and access for my success' captures participants' opinions about how schools could better include students with disabilities. Students' responses varied in some instances by disability and ranged between tangible and intangible dimensions. The more tangible suggestions were the need for accommodations in the area of technology, the implementation of the regular education curriculum in special schools and certification for students at special schools. While the intangible approaches to inclusion simply stressed the need for schools to provide equal access, opportunities, and teachers to adopt positive expectations of students with disabilities.

The inclusion and use of technology were the most frequently cited accommodation noted by students in the study. It was particularly important for students with sensory impairments who noted that skilled interpreters and closed-captioned were really in demand. Sandra captured this sentiment best, when sh noted that: "[schools] need to have interpreters and more technology . . . the use of pictures to help you understand concepts more and putting up words to help you see spelling." [Sandra/Female/Deaf/Barbados]

For students with physical impairments, they noted the need for schools to locate their classes on the ground floor. Crystal noted that schools should "put more classes on the ground

floor . . . [it should be] paved to [help me] push myself around or have someone push me around.” [Crystal/Physical Impairment/Barbados]

On the other hand, the more intangible approaches to inclusion mentioned in the students' narratives included the provision of equality of opportunity, for example, Sandra stated that ‘the school made sure that I had an equal opportunity of obtaining an education . . . some teachers provided me with notes . . .’ [Rene/Physical Impairment/Trinidad]

Other accounts emphasised the need for special schools to provide access to certification opportunities similar to those for students without impairments in regular education settings. Martha emphasized: “The schools need to do it [Caribbean Examination Council Certificates] because everyone doesn’t have access to funding . . . doing it privately [like I had to] means paying for it.” [Martha/Physical Impairment/Barbados]

What is clear from the narratives of students is that the school bears a great social responsibility concerning how it includes students with disabilities. As schools in Barbados and Trinidad seek to become more inclusive, the continued existence of special schools and units are a contradiction that is not easily reconciled with either the philosophy or practice of inclusion. In reality, it means that there is a need to balance education provision and service delivery between special and regular school settings in these islands.

Finding ways for students in special schools to be successful and transition to post-secondary education settings starts by extending access to the same regular education curriculum and certification opportunities as their peers without impairments (Haber, et al., 2015). Furthermore, participants in this study suggested that technology specific to the nature of their impairments provided one of the best ways to facilitate inclusion. This is congruent with research by Newman and Madaus (2015) on the issue of accommodating students with disabilities in secondary schools. They suggested that students who were deaf needed to utilise close captioning and sign language interpreters, while other students needed access to the full range of

accommodations. Other research by Pivik (2010) suggests that architectural barriers such as narrow staircases and the inclusion of elevators were needed so students with physical impairments could access classes on upper floors. Students with disabilities are entitled to accommodation and principles of access and equality of opportunity are important to ensure the schools meet their social responsibility to these students. It should also extend and permeate the micro, meso, macro and exo system layers of the school setting to promote successful teacher-student relationships, peer relationships, and transition planning.

Implications

This retrospective study documented the schooling experiences and barriers to participation experienced by students with disabilities at secondary school in Barbados and Trinidad. Findings suggested that the environment profoundly influenced the level of participation of students with disabilities at secondary school. We found that the nature of social interactions predominantly in the micro and meso systems (Bronfenbrenner, 1979) exerted a powerful influence on teacher-student and peers with and without disabilities' relationships. Teacher actions and interactions oscillated between being conflictual and accommodating, and this was linked to how much teachers knew about the nature and needs of students' impairments. With respect to peer relationships, these also ranged between periods of conviviality and unfriendliness. Some students experienced conflictual social relationships that negatively impacted their psycho-social adjustment and emotional security. This is especially true of students that encountered bullying behaviours at secondary school, for example, those who are Deaf and those with physical impairments. Our research sample was modest and therefore we cannot speculate about the rate or frequency of bullying experienced by students with disabilities. It does suggest and support research findings by Weiner, et al., (2013) which noted that teachers and peers without disabilities must intervene and support students with disabilities to prevent further instances of bullying.

Similarly, we also found that teacher-student relationships in the micro and meso systems were conflictual and that there is a need for teachers to understand how conflict influences the participation of students with disabilities. When the environment does not meet the needs of an individual for relatedness, involvement, and competence, it can have an adverse impact on their adjustment (Fredricks, Blumfeld & Paris, 2004). Findings indicated that students with Asperger's Syndrome, mobility impairments, and sensory impairment experienced a sense of isolation and exclusion from their school settings when teachers were ignorant about how to meet their needs or were unsympathetic in their attitudes towards these students. The implications of this research in Trinidad and Tobago and Barbados suggest a need for more teacher training in inclusive practices to remediate dysfunctional socio-emotional relationships.

Moreover, our research highlighted the need for the exo-system or the environment to be responsive and accommodate the social, behavioural, learning and psychological needs of students with disabilities. This could do much to allow students to enjoy a sense of belonging in Barbadian and Trinidadian classrooms. The inclusion of technology designed to compensate for the nature of the students' impairment is well documented and must continue to be endorsed. The addition of closed- captioning and sign language interpreters can do much to enhance communication between persons who are deaf, their teachers, and peers who are non-disabled.

Our research has limitations that include its small sample size and the nature of retrospective research which does not allow these findings to be generalised to a larger population and does not provide a current picture of the phenomenon. Despite these shortcomings, we believe that the findings are useful in that they provide a platform for future research and fills a gap in the international literature on hearing the voices of persons with disabilities (Farrell, 2000; Byrnes & Rikards 2011) from the Caribbean context. Further research is needed to understand the schooling experiences of students with disabilities longitudinally, and

studies are also needed to understand how barriers to participation influence specific group of students with impairments in the Caribbean.

References:

- Angelides, P., & Aravi, C. (2006). A comparative perspective on the experiences of deaf and hard of hearing individuals as students at mainstream and special school. *American Annals of the Deaf*, 151, 476-487. <http://dx.doi.org/10.1353/aad.2007.0001>
- Babic, M., & Dowling, M. (2015). Social support, the presence of barriers and ideas for the future from students with disabilities in the higher education system in Croatia. *Disability & Society*, 30(4), 614-629.
- Berk, L. E. (1989). *Development through the lifespan*. Needham Heights, MA: Allyn & Bacon.
- Blackman, S. (2010). Who I work with is important: dyslexic students' narratives about the benefits of grouping for instruction in Caribbean classrooms. *Support for Learning*, 25(1), 4-10. <http://dx.doi.org/10.1111/j.1467-9604.2009.01432.x>
- Blackman, S. (2011). Using pupil perspective to inform teacher pedagogy. *Journal of Research in Special Education Needs*, 11(3), 178-185.
- Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Cambridge, MA: Harvard University Press.
- Brown, M. R., Higgins, K., Pierce, T., Hong, E., & Thoma, C. (2003). Secondary Students' Perceptions of School Life with Regard to Alienation: The Effects of Disability, Gender and Race. *Learning Disability Quarterly*, 26(4), 227-238.
<http://dx.doi.org/10.2307/1593636>
- Byrnes, L. J., & Rickards, F. W. (2011). Listening to the voices of students with disabilities: Can such voices inform practice? *Australasian Journal of Special Education*, 35(1), 25-34.
<http://dx.doi.org/10.1375/ajse.35.1.25>

- Conrad, D.A., Blackman, S. N. J. & Philip, L.M. (2015). *Supporting the integration and learning of students with disabilities at U.W.I. Cave Hill and St. Augustine Campuses*. A paper presented at Towards Social Integration Rights Roles Recognition of Persons with Disabilities. UWI Network and Outreach for Disability Education and Sensitization and Disability Studies Unit, University of the West Indies St. Augustine Campus.
- Coster, W., Law, M., Bedell, G., Liljenquist, K., Kao, Y. C., Khetani, M., & Teplicky, R. (2013). School participation, supports and barriers of students with and without disabilities. *Child: Care, Health and Development*, 39(4), 535-543.
<http://dx.doi.org/10.1111/cch.12046>
- Denzin, N., & Lincoln, Y. S. (2005). *The sage handbook of qualitative research*. Thousand Oaks, CA: SAGE.
- Dugan, E., Kamps, D., Leonard, B., Watkins, N., Rheinberger, A., & Stackhaus, J. (1995). Effects of cooperative learning groups during social studies for students with autism and fourth-grade peers. *Journal of Applied Behaviour Analysis*, 28(2), 175-188.
- Eriksson, L., & Granlund, M. (2004a). Conceptions of participation in students with disabilities and persons in their close environment. *Journal of Developmental and Physical Disabilities*, 16(3), 229-245.
<http://dx.doi.org/10.1023/B:JODD.0000032299.31588.fd>
- Eriksson, L. (2005). The relationship between school environment and participation for students with disabilities. *Paediatric Rehabilitation*, 8(2), 130-139.
<http://dx.doi.org/10.1080/13638490400029977>
- Eriksson L., Welander, J., & Granlund, M. (2007). Participation in everyday school activities for children with and without disabilities. *Journal of Developmental and Physical Disabilities*, 19(5), 485-502.

- Farrell, P. (2000). The impact of research on developments in inclusive education. *International Journal of Inclusive Education*, 4(2), 153-162.
- Flick, U. (2006). *An introduction to qualitative research* (3rd ed.). Thousand Oaks, CA: SAGE.
- Fink, W. (1977). *An investigation of teacher consequences in unstructured social interactions with mildly handicapped, moderately handicapped, and "typical" children*. Unpublished PhD dissertation). Department of Special Education, University of Oregon.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59-109.
<http://dx.doi.org/10.3102/00346543074001059>
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: strategies for qualitative research*. London, UK: Wiedenfeld and Nicholson.
- Haber, M. G., Mazzotti, V. L., Mustian, A. L., Rowe, D. A., Bartholomew, A. L., Test, D. W., & Fowler, C. H. (2015). What works, when, for whom, and with whom a meta-analytic review of predictors of post-secondary success for students with disabilities. *Review of Educational Research*. doi: 10.3102/0034654315583135.
- Harrington, C. (2014). *Square pegs in round holes: the mainstream schooling experiences of students with an autism spectrum disorder and their parents*. (Unpublished B. Ed thesis) University of Queensland Australia, Australia.
- Hemmingson, H. & Borell, L. (2002). Environmental barriers in mainstream schools. *Child: Care, Health and Development*, 28(1), 57-63. <http://dx.doi.org/10.1046/j.1365-2214.2002.00240.x>
- Hong, B. S. (2015). Qualitative analysis of the barriers college students with disabilities experience in higher education. *Journal of College Student Development*, 56(3), 209-226.
<http://dx.doi.org/10.1353/csd.2015.0032>
- Individuals with Disabilities Education Act of 2004, 300 § A, 300.8

- Kiernan, C. (1999). Participation in research by people with learning disability: origins and issues. *British Journal of Learning Disabilities*, 27(2), 43-47.
- Koster, M., Pijl, S. J., Nakken, H., & Van Houten, E. (2010). Social participation of students with special needs in regular education in the Netherlands. *International Journal of Disability, Development and Education*, 57(1), 59-75.
<http://dx.doi.org/10.1080/10349120903537905>
- Kluwin, T., Stinson, M., & Colarossi, G. (2002). Social processes and outcome of in school contact between deaf and hearing peers. *Journal of Deaf Studies and Deaf Education*, 7, 200-213. <http://dx.doi.org/10.1093/deafed/7.3.200>
- Law, M., King, G., King, S., Kertoy, M., Hurley, P., Rosenbaum, P., Young, N. & Hanna, S. (2006). Patterns of participation in recreational and leisure activities among children with complex physical disabilities. *Developmental Medicine & Child Neurology*, 48(5), 337-342. <http://dx.doi.org/10.1017/S0012162206000740>
- Law, M., Petrenchik, T., King, G., & Hurley, P. (2007). Perceived environmental barriers to recreational, community, and school participation for children and youth with physical disabilities. *Archives of Physical Medicine and Rehabilitation*, 88(12), 1636-1642.
- Lidström, H., & Hemmingsson, H. (2014). Benefits of the use of ICT in school activities by students with motor, speech, visual, and hearing impairment: a literature review. *Scandinavian Journal of Occupational Therapy*, 21(4), 251-266.
- Mertens, D. M., & McLaughlin, J.A. (2004). *Research and evaluation methods in special education*. Thousand Oaks, California: Corwin Press.
- Messent, R., P., Cooke, C. B., & Long, J. (1999). Primary and secondary barriers to physically active healthy lifestyles for adults with learning disabilities. *Disability and Rehabilitation*, 21(9), 409-419.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*.

Thousand Oaks, CA: SAGE.

Ministry of Education Barbados. (2013). *Statistics on education in Barbados at a glance*.

Bridgetown, Barbados: Ministry of Education Youth Affairs and Culture.

Moola, F. J. (2015). Accessibility on the move: Investigating how students with disabilities at the University of Manitoba experience the body, self, and physical activity. *Disability Studies Quarterly*, 35(1). Accessed January 09, 2016. <http://dsq-sds.org/article/view/4410/383>

Newman, L. A., & Madaus, J. W. (2015). Reported Accommodations and Supports Provided to Secondary and Postsecondary Students with Disabilities National Perspective. *Career Development and Transition for Exceptional Individuals*, 38(3), 173-181.
<http://dx.doi.org/10.1177/2165143413518235>

Ontarians with Disabilities Act, § 2001, c. 32 (2001).

Pivik, J. R. (2010). The perspective of children and youth: How different stakeholders identify architectural barriers for inclusion in schools. *Journal of Environmental Psychology*, 30(4), 510-517. <http://dx.doi.org/10.1016/j.jenvp.2010.02.005>

Pivik, J., Mccomas, J. & Laflamme, M. (2002). Barriers and facilitators to inclusive education. *Council for Exceptional Children*, 69(1), 97-107.

Robson, C., & McCartan, K. (2016). *Real world research*. New York, NY: John Wiley & Sons.

Rose, C. A., Swearer, S. M., & Espelage, D. L. (2012). Bullying and students with disabilities: The untold narrative. *Focus on Exceptional Children*, 45(2), 1-10.

Safran, J. S. (2002). Supporting students with Asperger's syndrome in general education. *Teaching Exceptional Children*, 34(5), 60.

<http://dx.doi.org/10.1177/004005990203400510>

Saldaña, J. (2015). *The coding manual for qualitative researchers*. Sage.

Strauss, A. L. (1987). *Qualitative analysis for social scientists*. Cambridge, UK: Cambridge

University Press.

Strnadová, I., Hájková, V., & Květoňová, L. (2015). Voices of university students with disabilities: inclusive education on the tertiary level – a reality or a distant dream?

International Journal of Inclusive Education, 19(10), 1080-1095.

<http://dx.doi.org/10.1080/13603116.2015.1037868>

Trainor, A. A., & Graue, E. (2013). *Reviewing qualitative research in the social sciences*. New York, NY: Routledge.

Trinidad and Tobago National Task Force on Education. (1994). *Education policy paper (1993-2003)*. Port of Spain, Trinidad: Ministry of Education.

Weiner, M. T., Day, S. J., & Galvan, D. (2013). Deaf and hard of hearing students' perspectives on bullying and school climate. *American Annals of the Deaf, 158(3)*, 334-343.

<http://dx.doi.org/10.1353/aad.2013.0029>

World Health Organization (2001). International classification of functioning, disability and health (ICF). Geneva, Switzerland. Retrieved from

<http://www.who.int/classifications/icf/en/>

Vlachou, A. & Papananou, I. (2014). Disabled students' narratives about their schooling experiences. *Disability and Society, 30(1)*, 73-86.

<http://dx.doi.org/10.1080/09687599.2014.98278>