Students With Mild Cerebral Palsy in The Classroom: Information and Guidelines for Teachers

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Students With Mild Cerebral Palsy in The Classroom: Information and Guidelines for Teachers

Acknowledgments
I would like to thank my professor, Dr. Julia Wilkins, for her assistance and support throughout my capstone research.
Cerebral palsy (CP) is the most common motor disability in childhood and affects about two to three children out of every 1,000 babies born in the United States (Stern Law, 2017). There are several forms of CP ranging from mild cases involving slight mobility issues to more severe cases involving speech impediments and the use of a wheelchair. Most teachers feel better prepared to include students with severe forms of CP in their classrooms because these students’ needs are “obvious,” whereas the needs of students with mild CP are often not evident. In my own school experience as a person with mild CP, I felt that my teachers struggled to notice the small things I needed help with throughout the school day. When mild disabilities are not noticeable in the school setting, teachers may forget students have disabilities and are therefore less likely to effectively meet the needs of these students.

Cook (2001) suggests that students with hidden disabilities are rejected by their teachers because teachers are unable to identify how the disability affects the child, making it difficult for them to determine appropriate levels of support for the child. The way a teacher treats a child with mild disabilities has a direct effect on how their peers respond to them (Huang & Diamond, 2009; Lindsay & McPherson, 2012). In other words, if the teacher chooses to treat a child with mild CP as a typical student while subtly modifying their learning environment, the child’s peers will treat them as a typical student as well.

The purpose of my study is to gather the perspectives of individuals with mild cerebral palsy about their experiences in school. I compiled a list of guidelines for teachers based on the first-hand experiences of students with CP in order to provide a resource that teachers can use to effectively support and respond to students with mild CP in their classroom.

**Literature Review**

This literature review focuses on research conducted on children with mild physical disabilities in school settings. I begin by discussing teachers’ perspectives of students with physical disabilities and then discuss factors that affect the participation levels of students with cerebral palsy. Next, I describe findings from research on perspectives of individuals with CP.

*Teachers’ Perspectives of Students with Disabilities.* Research indicates that teachers who do not have specific training in special education often feel
unprepared to teach students with physical disabilities. This is particularly the case when the class depends on physical activity, as with physical education (PE) classes. For example, from their interviews with five high school PE teachers in Pennsylvania, Casebolt and Hodge (2010), found that teachers wanted more professional training in teaching children who had “severe disabilities, emotional-behavioral disorders, hyperactivity, and attention deficits” (Casebolt & Hodge, 2010, p. 410). In particular, PE teachers felt unprepared for the physical demands and accommodations needed for the students in their classes.

On the contrary, when it comes to general education classroom teachers, it has been found that teachers often find it easier to make adaptations for students with physical disabilities than students with hidden disabilities because the needs of students with physical disabilities are easier to identify. In a study of 155 preschool teachers in the United States, Huang and Diamond (2009) analyzed data collected from The Teachers’ Comfort and Concerns Questionnaire, which described four hypothetical children with disabilities and required teachers to rank the four children in different categories to determine how comfortable they would feel integrating the children in their classroom. The results indicated that teachers would feel more comfortable including a child with a mild physical disability in their classroom than a child with severe cognitive disabilities.

In a similar study, Cook (2001) aimed to determine whether teachers’ attitudes toward their students with disabilities in general education classrooms differed based on the severity of the student’s disability. Seventy general education elementary teachers in six Ohio school districts participated in the study. The teachers brought their class rosters to a faculty meeting and indicated how they felt about their students based on the following four attitudinal categories: attachment, concern, indifference, and rejection. Teachers’ selections indicated that the students with obvious disabilities were overrepresented among teachers’ “indifference” nominations and students with hidden disabilities were overrepresented in teachers’ “rejection” nominations. Cook (2001) suggested that teachers were less likely to reject students with obvious disabilities because their level of performance was anticipated. However, when students had hidden disabilities, teachers had more difficulties identifying the behaviors associated with the disability and the students therefore posed more of a challenge to teachers in the classroom.

Overall, these studies indicate that teachers struggle with making appropriate adaptations for students with disabilities in the classroom when they are not familiar with the disability and the accommodations that need to be made for the student. When it comes to general education teachers, hidden disabilities make it difficult to anticipate students’ needs whereas physical disabilities provide teachers with a more visible gauge of students’ abilities and limitations. When the content of the class depends on physical activity, such as a PE class, having a physical disability poses a problem for teachers who do not have adequate preparation in how to include students with physical disabilities in their classroom.

Participation in School Activities. When students have mobility issues due to a physical disability and teachers do not have adequate preparation for how to accommodate students with physical disabilities, students may be prevented from opportunities to participate in school activities. These findings were supported in two studies conducted in different cross-cultural contexts.

Schenker, Coster, and Parush (2005) investigated the levels of participation and activity performance of students with CP in an inclusive school in Israel. A total of 248 elementary school students were divided into three groups: 100 fully included students with CP, 100 students with CP matched by class and gender with typical students, and 48 students with CP in self-contained classes. Students completed a School Function Assessment, which is a tool that measures a student’s performance of tasks with a disability; in this case, the student’s cerebral palsy. The results indicated that activity performance limitations had an impact on school participation, which are findings that have been
Students with Mild Cerebral Palsy

mirrored in other international studies (e.g., Furtado, Sampaio, Kirkwood, Vaz, & Mancini, 2015).

In attempting to determine the main reason for the lack of participation in school among children with CP in Brazil, Furtado et al. (2015) explored the moderating effect of environmental factors in the relationship between mobility and school participation of 102 children and adolescents with CP. Participants’ parents, guardians, and teachers were given assessments to determine what they thought were barriers for the child. Parents identified transportation, government policy, and services in the community as the main barriers, but of the different instrument subscales, school/work was seen as the greatest barrier to the participation of their children. The results further indicated that mobility affected students’ participation in school more than any environmental factors assessed. The researchers pointed out that for teachers to provide effective teaching strategies for students with disabilities, they must understand the students’ health conditions, capabilities, limitations, and educational needs.

Perspectives of Individuals With Cerebral Palsy.
Cerebral Palsy is different from many disabilities in that in addition to mobility limitations, it also causes pain and fatigue. So even in situations where teachers may feel comfortable accommodating students based on students’ visible physical characteristics, they may still struggle with understanding the impact of pain and fatigue on students’ school participation and performance. Several studies have been conducted from the perspective of students with cerebral palsy in order to better understand the role of pain and fatigue in their lives.

Lindsay (2016) conducted a review of previously published research to gather information that could be used by rehabilitation and social services to enhance their programs and improve the lives of youth with cerebral palsy. She evaluated 33 articles published from 1980 to 2014, involving 390 children and youth in six countries. A common theme identified in the articles was that youth with CP experienced pain, fatigue, and impairments to body function which, in turn, created social isolation that affected the individuals in different ways throughout their lives. Despite these struggles, the youth created ways to deal with their disabilities that gave them a sense of personal and social normalcy. Examples included trying tasks multiple times until they succeeded and accepting their disability as a part of who they were, while acknowledging that it did not encompass all that they were.

Although students with CP may develop strategies that give them a sense of personal and social normalcy, this sentiment is not always shared by others in their environment. For example, from their study of children with and without CP in general education classes in Canada, Nadeau and Tessier (2006) found that children with CP had fewer reciprocated friendships, displayed fewer social leadership behaviors, and were more withdrawn and personally victimized by their peers compared to children without CP.

Due to the social isolation and victimization of students with CP in general education classes, in another Canadian study, Lindsay and McPherson (2012) interviewed 15 children with CP ages 8 through 19 in general education classes to determine how to improve social inclusion. Findings from the interviews indicated that the extent to which children with CP were included in their school environment and the attitudes their teachers had towards them had a profound effect on whether or not they were socially included. For example, if their teachers chose not to treat children with CP as different and the school offered several ways for them to be included in their classrooms, their peers were more likely to include them in activities.

Pain, Fatigue, and Quality of Life. Although teachers’ treatment of students with CP can influence their peers’ attitudes towards them, these students may also struggle with pain and fatigue such that their quality of life is negatively affected. To determine the extent to which pain and fatigue either together or separately affected quality of life for children with CP, Berrin et al. (2007) administered instruments to 73 children with CP and 189 parents of children with CP.
Results of these assessments confirmed that pain and fatigue do play a role in quality of life for children with CP. Therefore, if steps are taken to not only address the inclusion of students with CP, but also to help reduce the pain and fatigue experienced by these children, it may help improve their functioning in school.

Other studies have found that merely having CP does not affect an individual’s quality of life. For example, Moore, Allegrante, Palma, Lewin, and Carlson (2010) researched both the quality of life for children with CP as well as the psychological and social aspects of their disability. Twenty male and female children between the ages of 5 and 17 with mild CP participated in the study during their yearly therapeutic evaluation at a private practice. Participants filled out a Pediatric Quality of Life inventory, and it was found that their scores were similar to those of children without a disability. In addition, five children and their families were selected for interviews. Interview findings revealed that the children did not think about having CP on a daily basis and that CP did not influence their quality of life.

Overall, findings from these studies indicate that while some teachers struggle with how to include students with physical disabilities (Casebolt & Hodge, 2010), teachers are more accepting of students with mild physical disabilities than students with disabilities that are not visible (Cook, 2001). It has also been found that students with CP often have low levels of participation in activities, with mobility being the greatest challenge to participation (Furtado et al., 2015; Schenker et al., 2005). Although one study indicated that students with CP did not focus on their disability on a daily basis and that CP did not affect children’s quality of life (Moore et al., 2010), findings from other studies indicated that pain and fatigue did affect quality of life (Berrin et al., 2007) and some students with CP experienced social isolation from their peers (Nadeau & Tessier 2006). Despite these issues, research indicates that children and youth adapted to their lives with CP and learned how to thrive on a daily basis (Lindsay, 2016; Moore et al., 2010), and if teachers chose not to treat children with CP as different, their peers would act the same (Lindsay & McPherson, 2012).

Methodologies

After receiving approval from the Institutional Review Board (IRB) at my college, I contacted the Development Coordinator at the United Cerebral Palsy of South Carolina, explaining the purpose of my study and requesting that she forward a flyer with information to potential participants. After two weeks I had only received two responses, so I created a Facebook post to recruit individuals with mild CP who would be willing to participate in my study. I also used word of mouth to inform friends in college and in my home town about my research.

Through these various methods, I was able to recruit four individuals with mild cerebral palsy. I prepared interview questions beforehand and asked additional follow up questions based on participants’ responses. I interviewed each participant via FaceTime and recorded the interview on my laptop. After the interview, I listened to the recording and transcribed it. I then read through each transcript and coded it according to procedures described by Bogdan and Biklen (1998). After coding each transcript individually, I read through them again and made notes in the margin of similar experiences mentioned by participants. I then created categories and put examples of each participant’s experiences in the categories. I compared quotes and categories and refined them to create themes. Based on information provided by participants in the interviews, I created a tip sheet entitled, Information and Guidelines for Teachers of Students with Mild Cerebral Palsy (CP). In the following section, I describe my participants. All names and identifying characteristics have been changed to protect their identities.

Participants. The first person I interviewed was a 21-year-old college student named Hannah who had mild spastic diplegia CP that affected mobility in both her legs. She was the only participant who had an Individualized Education Program (IEP). Hannah’s IEP accommodations allowed her to leave her classes a few minutes early to get to her next class on time and use the elevator between floors. She also had an aide who carried
her belongings and made sure she made it to and from her classes safely.

Olivia was also a 21-year-old college student who had mild spastic diplegia that affected both her legs and had mild effects on her arms. In elementary school, Olivia’s teachers were aware of her disability due to several surgeries she had between second and fifth grade, but she stated that they did not properly accommodate her and would force her to do things she could not do. She described these school experiences as traumatic and embarrassing.

Caroline, my third participant, was a 20-year-old high school graduate whose mild CP affected her left foot and caused a slight limp. Of all my participants, Caroline had the least noticeable form of mild CP. She had a math learning disability, but her physical disability had little effect on her life at school. Caroline described herself as a very private person who liked the fact that people did not know she had CP, because it was “none of their business.”

My final participant was Mark, a 19-year-old junior in college who had mild spastic hemiplegia CP that affected his right side, predominantly his right hand and foot. He walked on his tiptoes and he had a slight limp due to the fact that his right foot was turned slightly inward. Mark did not like disability labels because he felt the perception of people with disabilities was that they had to be dependent on others to function.

**Common Experiences**

In the following section, I describe some of the common experiences discussed by the participants. These experiences involved the following four themes: (a) bullying experiences in elementary school, (b) teacher support and accommodations in school, (c) being asked about their disability, and (d) being grateful for having “mild” cerebral palsy.

*Bullying Experiences in Elementary School.* Three of the four participants had distinct memories of being bullied in elementary school and described language they found particularly offensive. Mark stated, “[I] was always called retarded because I limped and stuff, and I was called For-
Hannah and Mark both felt that a private conversation between the student with mild CP and the teacher about the support they needed in the classroom would help the teacher understand their needs; the student could also use this opportunity to reiterate that they did not require any extra assistance aside from what was legally mandated. Mark prided himself on being an independent person. He did not want special treatment or to be dependent on someone else. Mark passed as “normal” in society, and any other treatment upset him. He also addressed how important it was for teachers to be a constant presence in the classroom and be aware of what was going on at all times by “making sure that particular student and other students in the class with disabilities feel protected.”

Mark’s mindset of “passing” in society was similar to Olivia’s reasoning for not wanting an IEP, even though it seemed she would have benefitted from one. She explained, “I do not want to go to an office and come up with a plan for me because that is drawing more attention to myself.” Olivia emphasized how subtle provisions that her teachers made were the most beneficial to her success in school. For example, Olivia’s psychology teacher would let her leave a class copy of the textbook in the room so she would not have to walk across the school carrying it. She also preferred adaptations made for the whole class, such as the teacher giving the class the option to type up a paper knowing Olivia’s hand cramped up when she wrote.

Similarly, Caroline felt that modifications made by the teacher for her CP brought too much attention to her. She emphasized that she was a private and reserved person and that her changes in what she was expected to do identified her as different while she “tried to look as normal as possible.” As with Mark, she liked that people did not know she had CP, but not because she needed to claim her independence, but because she felt it was her “personal business.” She described feeling anxious or uncomfortable when a teacher tried to help her. In Caroline’s opinion, teachers should provide additional services or assistance a child needs while “not ask[ing] personal questions toward them which makes them feel uncomfortable or anxious.”

### Being Asked About Their Disability

All participants described situations in which they were asked about their CP, and they each provided different perspectives on how they responded. The few times Caroline had been asked about her limp, she responded by simply telling people she was born that way. She was a private person who said she did not “like putting my business out there, so I try to keep [my CP] to myself and under wraps.” Aside from her family, no one else in her life knew she had cerebral palsy, and she therefore did not feel it affected her on a daily basis.

When people were able to identify Mark’s CP, he did not mind explaining it as long as it related to the situation at hand and he was not asked in an insensitive way. He described being offended in the past when friends or professors noticed his limp and asked him what happened to his leg or if he had been in an accident. He said that when people asked about his CP at an appropriate time, he explained how it affected him by visually “mak[ing] them aware of the symptoms. I guess that is why I show people my hands are different sizes and my leg and explain what I can and cannot do.”

Hannah, on the other hand, felt that it was rude when people noticed her disability, but did not ask about it. She wanted more opportunities to answer questions about her CP with others and hoped to break the stereotype that disabilities should not be discussed openly. Referring to people who noticed her disability, but did not ask questions about it, she stated, “That is not okay to me because I want you to ask me questions and show that you care instead of just ignoring me and being weird around me.” She claimed that most people did not notice she had CP while she was sitting down talking to them, but when she stood up to walk across the room, they would notice and some would treat her differently afterwards.

As with Hannah, Olivia wanted people to notice her disability. When asked how it felt to have a disability that was not always noticeable, one of her responses was how hurt she got when
her closest friends forgot she had a disability. “In one respect, I am glad you can look at me and see beyond my disability and do not define me in that way, but I do not get to forget. It is hard to see you forget when I do not ever get to,” she stated. She also reflected that people either “see me as just a person with CP or someone who is so much more than my disability,” which was a perspective that was unique to the participants I spoke with; all the others felt accepted by others who knew about their disability.

Gratitude for Having Mild CP. When I asked the participants if they ever wondered if their lives would be more challenging or easier if they had a more severe form of CP, I received a unanimous response from the participants. Hannah said she felt “blessed” that she could live independent-ly and that “just a couple more minutes of my delayed birth could have been so much worse.” Mark talked about how he had seen people at his school with severe disabilities and felt “lucky” that he was not in a wheelchair, was not dependent on anyone, and was able to get a college diploma. Caroline had a friend with severe CP and her father told her “[you] could be a whole lot worse than you are now, so be glad that you are not confined to a wheelchair because she [friend] is going to be like that the rest of her life.” Similar to Mark’s sentiments, the idea that she could possibly have been in a wheelchair made her “thankful” that she did not face that challenge. Likewise, Olivia saw a patient in her doctor’s office who was in a wheelchair with a head support and felt “grateful” to be able to walk and be independent, realizing that she, too, could have been like the girl in the wheelchair. The possibility of not being able to walk had the greatest impact on Mark’s, Caroline’s, and Olivia’s perceptions of having a mild rather than a severe disability.

Discussion
Through my interviews with four participants with mild CP, I learned that their experiences in school and the way they dealt with their CP differed based on the personality of the individual. Caroline and Olivia were more comfortable “fitting in” to society the best they could and would have taken offense if someone were to ask them directly about their disability. All of the participants talked about how they did not want their CP to bring unwanted attention to themselves or define who they were. Mark saw his CP as a challenge in his life that he was learning to overcome by working out and strengthening the affected side of his body. Hannah chose to surround herself with others who had similar disabilities because she found them to be the most accepting of her differences. Since Caroline’s CP was so mild, she chose not to think about her disability at all. Only Olivia struggled with feeling rejected because of her CP.

Several of the findings from my research were similar to findings from previous research. For example, Casebolt and Hodge (2010) reported how PE teachers struggled to determine the limitations of a child with a disability, which was similar to an experience Olivia shared about a PE teacher who forced her to run and attempt a cartwheel despite the fact that these tasks were beyond her physical abilities. As with participants in other studies (e.g., Lindsay 2016; Nadeau & Tessier 2006), participants in my study expressed social isolation, mostly through bullying in elementary school. However, I also found that if teachers chose not to treat the student with mild CP as different, their peers would include them socially, which was similar to findings from the studies conducted by Huang and Diamond (2009) and Lindsay and McPherson (2012).

Caroline and Mark discussed not thinking about their CP very much and how the disability did not affect their independence as people. This is congruent with Moore et al.’s. (2010) findings that children with CP did not think about having CP on a daily basis and that it did not influence their quality of life.

Conclusion
Based on the information gathered in the interviews and the common experiences shared among the participants, I created a tip sheet (see Figure 1) with information and guidelines for teachers for how to include children with mild CP in their classrooms. Despite my participants’ different personalities and severity of
their mild CP, they were all college students of a similar age group in South Carolina. These similar characteristics posed a limitation on the diversity of my findings. If future studies were conducted, it would be best to incorporate a wider range of experiences based on students of different age groups, educational levels, and geographic locations. Gathering information from students who are still in school could be even more fruitful as the information would not be affected by the lag in time between students’ actual experiences in school and the time of the interview.

As a future teacher in South Carolina, I will educate others on my findings from this research and will seek additional research opportunities in the future to explore other aspects of life affected by having a mild physical disability.

References

Figure 1: Information and Guidelines for Teachers of Students with Mild Cerebral Palsy (CP)
There are varying forms of cerebral palsy. CP can involve just physical symptoms, but it may be accompanied by intellectual or learning disabilities. Additional Information: http://www.cerebralpalsy.org/about-cerebral-palsy/types-and-forms

Many students have surgery when young and may be in casts or use wheelchairs following surgery and will need extra support during this time. Additional Information: http://www.cerebralpalsy.org/about-cerebral-palsy/treatment/surgery/types-of-surgeries

Students may become fatigued due to the extra physical strain involved in carrying out every day tasks, such as writing, walking, or playing at recess. Additional Information: http://www.cerebralpalsysurgery.net/cerebral-palsy-and-fatigue.html

Most students experience pain at some point in the day although they will be used to it and may not mention it. Additional Information: http://www.cerebralpalsy.org/information/pain-management

Most students with CP want to be treated like other students, so they may not ask for help when they need it. Additional Information: http://kidshealth.org/en/parents/cp-factsheet.html?WT.ac=ctg

Most students with mild CP do not want attention drawn to them because of their disability. Additional Information: http://disability.illinois.edu/instructor-information/disability-specific-instructional-strategies/mobility-impairments

Teachers should be attentive to students’ hesitation to participate in physical activities they may feel uncomfortable with. Additional Information: http://www.pecentral.org/adapted/adaptedactivities.html

Teachers should intervene when young children ask questions that appear insensitive or call children with CP inappropriate names. Additional Information: https://www.stopbullying.gov/at-risk/groups/special-needs/

When students talk about their CP, do not express sympathy; it is a part of who they are. Additional Information: http://www.readingrockets.org/article/creating-positive-school-experiences-students-disabilities


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