

Examining the Impact of Disability Sports Unit on Students' Perceptions of Disability

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Abstract

The purpose of this research was to examine the influence of a disability sport curriculum on students' perceptions towards individuals with physical disabilities. Three fifth grade physical education classes (n=40) participated in seven disability sport lessons that included goalball, sled hockey and sitting volleyball. Data collection included focus group interviews and surveys to gain insight into the effectiveness of the sports in shaping perceptions of disability. An inductive thematic analysis was conducted on the qualitative data. Quantitative findings revealed little change in students' perceptions of individuals with physical disability. Qualitative data supported the qualitative findings in demonstrating the limited appreciation of the sports and a devaluing of the sport experience. The results support a critical analysis of curriculum and pedagogical practices that underscores the importance of discussing skill differences and the construct of ability in order to bring a deeper meaning to the disability sporting experiences. Recommendations include the need for teachers to become familiar with the skills necessary to play disability sports in order to provide their students with a more diverse perspective.

Keywords: disability sports, pedagogy, and curriculum

Physical education has traditionally relied on a curriculum of skill hierarchy and competition (Kirk, 1988). Bain (1975) refers to the "hidden curriculum as unplanned and unrecognized values taught and learned through the process of schooling" (p. 93). Implicit values of the teachers are communicated to the students through instruction and learning. Many teachers reinforce an ideology of the powerful and skilled body as culturally "representing and regulating the body" (Kirk, 1999, p. 65) through conformity in skill-based, competitive content areas.

Given this, we might reasonably expect to see some degree of consistency and continuity between physical education as it is currently practiced in schools and cultural trends that reflect a spectrum of bodily conceptions and ways that inform physical culture (Grenier, 2007). Within the schools, explicit connections between inclusion, sport, and participation can be used to promote the tenets of equity and access (Beckett, 2009). If difference is to be considered, it is important that inclusion in sport for individuals with disabilities be incorporated within the teaching structure that naturalizes disability and equitable opportunities (Penney & Hunter, 2006). While there appears to be a professional commitment to addressing inequity through pedagogical practices, little knowledge exists on how diversity and differences can be

addressed in physical education (Grenier, Wright, Collins, & Kearns, 2014).

In recent years, sports for individuals with disabilities have emerged as an avenue for competitive engagement, skill acquisition, and the development of social competencies (Fitzgerald & Kirk, 2009; Nixon, 2007). Many of the sports are modified versions such as volleyball and soccer, while others are specific to the disability such as goalball for the visually impaired. According to DePauw and Gavron (2005), disability sports were created for people with disabilities in response to the growing need for more sporting opportunities and the limited venues for athletes' 51 participation.

Research on Perceptions of Disability

Disability sports have been used to promote diversity within the physical education curriculum (Davis, 2011; Davis, Rocco-Dillon, Grenier, Martinez, & Aenchbacher, 2012; Grenier & Kearns, 2012). Grenier, Wright, Collins and Kearns' (2014) study on a disability sports curriculum found students came to view both individuals with and without disabilities as equal in status, providing a more accurate picture of what it means to be an athlete with a disability. In their work utilizing a Paralympic School Day program, McKay, Block, and Park (2015) found a statistically significant positive impact on the attitudes of students without disabilities toward the inclusion of students with disabilities in the physical education setting.

When examining disability as a tool for attitudinal change, Fitzgerald and Kirk (2009) state "there remains important questions unanswered about how disability sports are used within physical education, how they are valued by young disabled people and others around them, and what this all means for the ways in which disability, more generally is understood" (p. 94). Focus group interviews revealed that physical education (PE) teachers trivialized the sports by using them as punishment for the non-disabled students. Recommendations from the research included a consideration for the way in which the sports are incorporated into the general physical education (GPE) curriculum and the curricular consistencies they share with other content areas.

In an intervention study by Krahe and Altwasser (2006) involving 70 ninth grade students, comparisons were drawn between cognitive and behavioral components that involved two sport sessions conducted by athletes with disabilities. The cognitive group was provided with only information about the disability that challenged stereotypical notions. In the comparison group, a cognitive behavioral component included both knowledge of and participation in disability sports. Little change was found in the group that experienced only a cognitive component, while significant attitudinal change occurred in the cognitive-behavioral group. In a similar intervention study, Ison and colleagues (2010) examined a two-session disability awareness program conducted by athletes with disabilities on students between the ages of nine and 11. Improvements were found in knowledge, attitudes, and acceptance of disability as evidence of learning.

In France, a large-scale intervention study was implemented to assess students' attitudes towards their peers with a disability.

Godeau and colleagues (2010) designed a comprehensive educational disability intervention for seventh grade students that consisted of a project on disability. Although attitudes improved over time in both the control and intervention groups, no significant improvements were found, which the authors attributed to the high number of students with disabilities enrolled in the classes. Similarly, Wilhite, Mushett, Goldenberg and Trader (1997) conducted a school-based Paralympic program and found no attitudinal change in middle and high school students. As in the previous study, methodological procedures were cited as potential reasons for the lack of effect.

Another form of instruction intended to increase disability awareness are simulations. Simulations are teaching experiences intended to replicate the experience of having a disability. Some argue that simulations are demeaning to individuals with disabilities because they highlight limitations rather than abilities (Leo & Goodwin, 2016). Loovis and Loovis (1997) assessed the attitudes of 430 second through sixth grade students using the Children's Attitudes Toward Handicapped Scale. Students rotated through stations simulating a variety of disabilities such as using kitchen tongs to replicate speech impairment and completing 96 fine motor activities wearing stuffed gloves to simulate cerebral palsy. Little attitudinal change was noted which tends to reflect the literature on the ineffectiveness of simulations (Flower, Burns & Bottsford-Miller, 2007).

The way teachers structure the learning environment can encourage their students to value diversity and enhance their students' discourses regarding equity (Keddie, 2012; Lingard, 2005). Alternatively, practices that overtly or subtly exclude, may reinforce negative stereotypes of disability (Connor & Gabel, 2013). In their comprehensive review of the literature on physical education for students with disabilities, including teacher practices and attitudes, Block and Obrusnikova (2007) posed the question, "What are the effects and attitudes towards modifying traditional physical education activities to accommodate students with disabilities?" (p. 110). This question highlights the need to examine instructional practices that enrich student learning while potentially shaping perceptions of disability. Given that, the purpose of this research was to examine the influence of a disability sport curriculum on students' perceptions towards individuals with physical disabilities.

Methods

Setting

The research was conducted in an elementary school in New England that consisted of 250 students in kindergarten through eighth grade. School demographics included a mixed racial population and a cross-section of social-economic levels with 15% of the student population identified as having a disability that included autism spectrum disorders (ASD), sensory impairments and learning disabilities. There were no students with significant physical disabilities. Students had physical education twice a week for 45 minute each class.

Participants

The school was selected because of the interest of a teaching intern (student teacher) in piloting a disability sport curriculum.

Stew (pseudonym) was enrolled in a Master's program in Education and completing a year-long internship teaching physical education at the elementary and middle school levels. His cooperating teacher, Sam (pseudonym), was a 12-year veteran who had taught physical education at the elementary and middle school levels. Another physical education teacher, Heather, participated in teaching the sports.

Three fifth grade classes participated in a disability sport unit over a four-week period twice a week (n= 40 students). In accordance with the board of the school, all ethical procedures were followed and approved by the Institutional Review Board. After receiving permission from the university for the study permission slips were disseminated to the fourth and fifth grade students. Students were given one week to return the permission slips. Participants were able to withdraw from the study at any time.

Disability Sports Unit

The unit on disability sports consisted of seven lessons over four weeks. In the introductory class, students were introduced to the Paralympics by watching several videos of Paralympic sports, in particular goalball, sled hockey, and sitting volleyball. The videos exposed the students to the way in which the game was played in the Paralympics and was followed by a discussion about the athletes in the videos, the range of required skills needed to play the sports, and the Paralympics.

Over the next six lessons, the 5th graders spent two classes each on goalball, sled hockey, and sitting volleyball. Students were divided into three groups and rotated through each of the sports after two lessons including goalball, sled hockey and sitting 141 volleyball. The lessons consisted of an introduction to the sport, skill build-up activities, and game play. After every two lessons, the groups rotated until they each had two lessons of the sports. Throughout the lessons, opportunities for discussion on the sports and how students felt while playing the sports were discussed. Lessons were also supplemented with additional clips of the sports to promote discussions.

Data Collection

Surveys. Prior to the start of instruction, all students were given a modified version of the Questionnaire About Attitudes Towards the Physically Disabled by Seifert and Bergmann (1983). The survey has been used in previous studies to measure both attitudes and intervention effects towards individuals with physical disabilities (Krahe & Altwasser, 2006). The survey was designed to measure four different aspects of students' attitudes towards individuals with physical disabilities. These included feelings of unease, judgment of competencies, opinions on integration, and opinions on inclusion in GPE. Modifications were made to the original survey and piloted on 60 elementary students. After reviewing the questions with several noted experts in the field of adapted physical education and disability sports, several items were eliminated; the scale was reduced from a five point to a four-point 15-question scale ranging from strongly disagree (1) to strongly agree (4). Language was also simplified to address the cognitive abilities of fourth and fifth grade students. The survey addressed three indicators: *feelings of uncertainty when interacting with individuals with disabilities, reduced perceptions of functional*

competency, and lack of integration of individuals with disabilities. The first three questions measured students' feelings of uncertainty towards individuals with physical disabilities and their feelings regarding interactions with individuals with physical disabilities. The next four questions measured judgments of competencies. The final eight questions focused on integration and inclusion. Prior to administering the surveys, students were read the assent form, which explained their rights as participants. Students were shown pictures of individuals with disabilities in non-sport settings, with a discussion following on what it meant to have a physical disability. This was intended to clarify distinctions between physical and cognitive disabilities. The students then spread out across the gymnasium and were approximately 10 minutes to complete their survey. At the conclusion of the final lesson, students were given the same survey they took prior to participating in the unit.

Focus group interviews. At the beginning and end of the study, focus group interviews were conducted with two separate groups of 5th grade students. One group contained 12 students and the second group 14 students. To select the students for the interview groups, a random number generator from the website random.org was used. The numbers corresponded with the students' alphabetical rank, and they were asked to participate in the interviews. Each student at was selected agreed to participate in the recorded interviews. Prior to each interview, assent was also obtained. Students were asked a series of questions on their perceptions of disability, if they could distinguish between the Olympics, Special Olympics and Paralympics, and whether they thought changes should be made in their PE programs to accommodate students with disabilities.

Data Analysis

Quantitative data from the pre and post survey results were entered into a Microsoft Excel document and organized by question, and pre or post survey. Calculations were made on the group's average response for each question. From these numbers, calculations of the group's average response for each of the four sub-categories (feelings of unease, judgment of competencies, opinions on integration, and opinions on inclusion in 187 GPE). Calculating the differences between each group's pre and post averages comparisons were made between the two groups. Participants' responses to the each item on the 9-item survey were analyzed for central tendencies and descriptive data in both the pre-test and post-test conditions. Comparisons in means and frequencies between the two groups were addressed particularly as they informed the qualitative findings.

An inductive thematic analysis was conducted by the primary and a secondary researcher (Miles & Huberman, 1994). Line-by-line analysis of each of the questions highlighted key phrases and initial themes labelled sporting and teaching experiences and perception of disability. From there, the phrases were compared and examined to determine whether there were differences between the two groups of students. The transcripts were analysed for emerging themes and sub-themes that summarized the students' perspectives. To assure reliability of this coding process, the two researchers frequently met to compare findings.

Differences were noted between each individual pre-survey question and its corresponding post-survey question. Figures for each sub-group (feelings of unease, judgment of competencies,

opinions on integration, and opinions on inclusion in GPE) on the pre-survey were compared with post-survey. Both researchers compared and contrasted the potential qualitative themes over several meetings for consistency and across the data set to produce a more robust analysis while referencing quantitative data.

Results

The following tables show the figures for the group's average responses to the survey questions, organized by sub-group.

Table 1

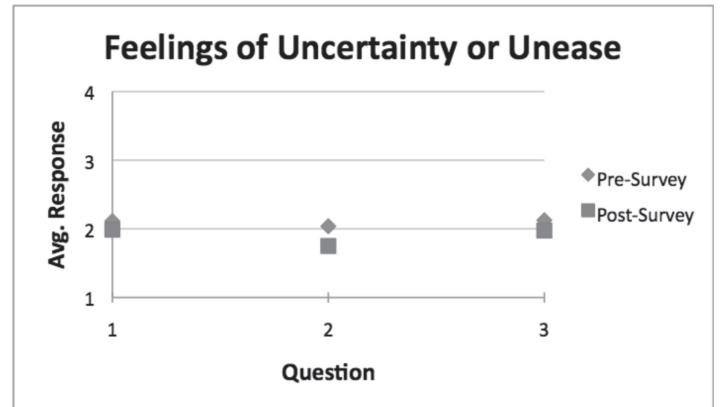


Table 2

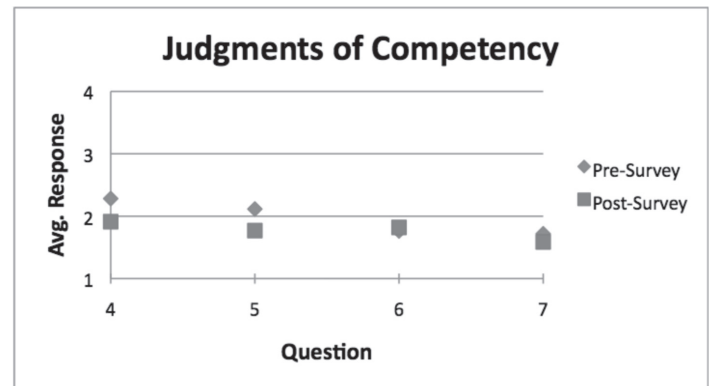


Table 3

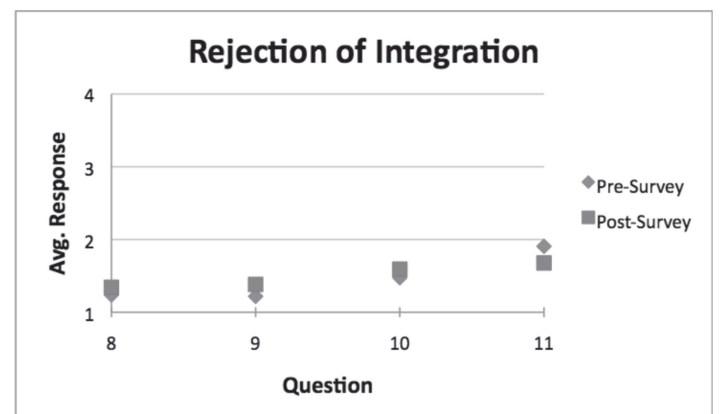
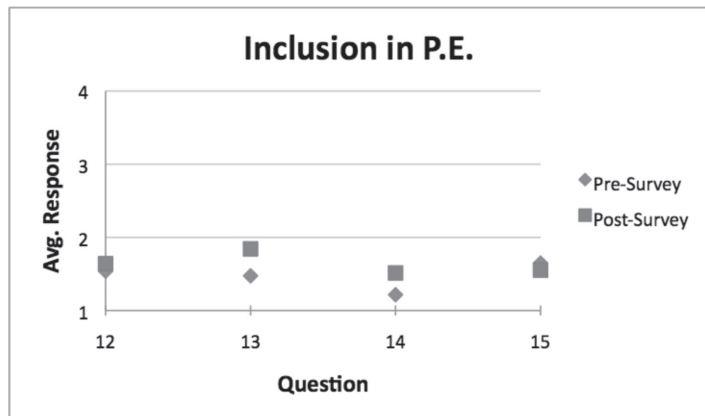


Table 4



As the above charts demonstrate, there were no significant differences in the pre-survey and post-survey responses for the group. It was assumed that there would be a universal shift towards lower-numbered responses in the post-survey, which would represent more disagreement with the negative statements in the survey on perceptions of individuals with physical disabilities. However, only eight of the questions showed lower average answers in the post-survey, and the differences were very slight, with the largest difference being .37 (question four). Additionally, the other seven questions actually showed higher 223 average responses in the post-survey. These, too, were minimal, with none of the differences exceeding .368.

Table 5 shows the cumulative average responses for each sub group. The sub-groups are numbered as follows:

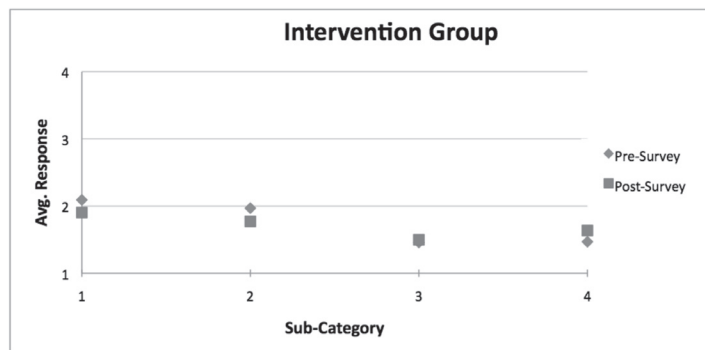
Sub-Group 1: feelings of uncertainty or unease towards individuals with physical disabilities.

Sub-Group 2: judgments of reduced functional competency of physically disabled individuals.

Sub-Group 3: rejecting integration with physically disabled individuals.

Sub-Group 4: opinions on inclusion of individuals with physical disabilities in a P.E. setting.

Table 5



This chart, which summarizes the total findings of the group's surveys, also shows insignificant changes between the pre- and post-surveys. Two of the sub-categories showed a shift towards lower average responses, which was hypothesized, but the shifts were very slight (both about .19). However, the other two categories showed a shift in the opposite direction. These, too, were slight, at

.04 and .17.

Qualitative Data

Three themes emerged from the interviews. The first, *Perceptions of Disability* highlights the unique experience of playing the sports. The second theme, *Depreciating Disability* identifies the impact of the teachers' efforts at drawing parallels to disability though the sporting experience. The final theme, *Disconnected Sporting Experiences* revealed the students' lack of connection between disability sports and their personal lives.

Perception of Disability

Prior to observing the video, many students had little to no prior experience engaging with individuals with disabilities. Students were intrigued by the videos and wanted to learn more about disability sports. Throughout the unit, they participated and engaged in the sports. It was consistently reported that the sports were hard or uncomfortable to play, as these quotes demonstrate by 5th graders:

"It's really hard 'cause when we were doing sitting volleyball it's really hard to get around without using your legs because you really have to rely on upper body strength and it's really hard to move around."

"...goal ball was kind of scary and like uncomfortable also because you don't know what the ball...when the ball is coming and where."

"It's kind of uncomfortable sometimes like on the sled hockey that it's like uncomfortable cause you're so tight and you want to get up but you can't."

"I say it was fun but it was definitely hard."

Many of the students had the realization that disability sports were more physically challenging than they originally thought. This led them to gain an appreciation for the sports, as well as the athletes who play them:

"At first I kind of thought they couldn't really do anything but they can do a lot now that I've seen what sports they can play."

"If I was watching a sit volleyball game and I never knew that, like what it's about, I would say that it doesn't look like it's much of an active sport."

"It showed me that like maybe it wasn't as easy as I thought, like in goalball, they're not really scared to stop the ball they just wanna like...not have the goal. They're really competitive...they really try to stop it and that's cool."

"I actually didn't think they were gonna be that good but once I saw them I saw that they were. It was really cool and they were really good at their sport and the way they play it."

“Mr. B [Sean] showed us a video about the people playing soccer with eye shades on who were blind and they were incredible. Like they knew where the goal was and they only missed by a couple of inches each time if they missed at all.”

These quotes reflect the students' sense of skill regarding the athletes and the sports they played. Their newfound appreciation for the sports was evident in their expression of wanting to watch future Paralympics. As one student put it:

“I think I'm probably gonna try to watch it and I have much more respect for the people that go out and do that.”

Depreciating Disability

Questions phrased by the teachers during the disability sport unit were intended to connect playing the sports with the experience of disability. However the teachers, while well intentioned, lacked specific knowledge in presenting information in a manner that could assist students in appreciating and valuing disability. At times questions 283 were more aligned with simulations (experiencing disability) rather than appreciating skills inherent to the sporting experience. Responses 5th graders revealed the parallels:

“We got to feel how people with disabilities would feel if they're playing sports and how hard it is for them to play sports.”

“It was good to...it was like a really, really small glimpse of how people like play...how disabled people play sports and it was...definitely hard.”

What we see in the comments is a connection of disability to victimization linked to the medical model that identifies people with disabilities by their deficiencies. In this understanding, disability is essentialized as a trait, reinforced through social structures that promote a categorical superiority of intellectual and physical functioning (Jones, 1996). For persons with disabilities whose physical and psychological dispositions fall outside established codes, differences translate into deficits (Davis, 1997). This was further reinforced in statement by the 5th graders.

“We can just get up and go away after that but I think it would be really hard for people that have to live that way for their whole life.”

“We have the chance to go back to our class everyday with being able to see or being able to...walk.”

“A lot of people thought it was fun to go around on the little scooters but then people who actually have to do that, they probably think it's not fun and they don't like it and they'd rather be walking around.”

“You win the game and...we get to go back and go on with our day...but they have, if they're blind they can't see for the rest of the day for the rest of their lives and if they can't walk

then it's really hard for them to move around.”

This “conundrum” (Campbell, 2009), is signaled as a sort of 306 apprehensiveness or something strange (p.13). For some, this further changed their outlook on physical disabilities:

“It has changed 'cause I know how horrible it would be to have a disability. So I think it has more meaning to me now.”

“Now if I see someone who has um a disability, I would try to help them 'cause I know how hard it can be just from doing it for 30-45 minutes and I'd feel bad for somebody who has to do it for their whole life.”

“I would treat disabled people with more respect because I know how hard it is cause I...well kind of know how hard it is to go through something that you don't use your arms or legs or your eyesight.”

Disconnected Sporting Experiences

The third and final theme that emerged from the students' statements was an apparent lack of connection between disability sports and their lives. At times, it appeared students were learning an almost foreign topic that didn't apply to their everyday lives. This view was expressed in several statements about the sports only being for individuals with physical disabilities:

“They can participate in some sports, like the sports that are meant for them.”

“If you don't have a leg it's gonna really be hard for you to play soccer...unless you play disability sports.”

“I think it's hard for most people also because if you're paralyzed and if you do have both arms or legs, it'd still be hard because you can't use it. But there's special sports they can still play.”

“Yeah, they don't play the way we play because of what... what disability they have...”

These statements reinforce a lack of connection to the sports or athletes who play the sports. When the physical education teacher, Sean, asked students if rules in physical education should be changed for students who may have disabilities, students' reaction revealed their lack of association and familiarity with disability.

“Uh, to be honest, I don't know any kid that's disabled in this grade.”

They nonetheless had some inclusive opinions about changing rules to accommodate individuals with physical disabilities:

“We don't have a disabled kid in our grade and, but if I was disabled and I had to do P.E. with everybody else I think um, I think it would be really hard for me. So, yes I think so, I

think we should change the rules.”

“We don't have any disability kids but If we did, I'd...I don't know...I'd like us to (change the rules) if we did so they could have a fun time as well.”

“I think that...if we had a disabled kid in our grade or disabled kids...I think we should, like, try to teach them how to do a regular sport and if that's not in their capability to do, say it would also be fun to do something that would be in their level too so we can kind of switch on and off.”

Attempting to translate the “play” experience into real experience was difficult revealing the tension between the assumption that somehow doing the sports could reflect a valid experience (Jeffries, 2005)

Discussion

A primary finding of the research was the lack of significant change from the survey data on both the control and intervention groups. This was surprising given differences in the curriculum. However, a close examination of the interviews reveals teaching practices that may not have effectively addressed the concepts of inclusion and the defining features of ability in athletes with disabilities. Taken together, it becomes important to discuss why the surveys showed no significant attitudinal changes after participation in the disability sports unit.

The students' participation in a disability sport unit did little to enhance or change their views towards individuals with physical disabilities. Hence, we recognize that impact of shaping perceptions of disability for elementary school students involves more than simply having students participate in the sports (Grenier, Wright, Collins, & Kearns, 2014). Significant pedagogical practices must also be included specifically directed at the sports themselves and not the implications of the sports on the individuals' disability. Negotiating differences through the sports and the skills needed to achieve competence in the sports should be the pedagogical priority by focusing on what their students with disabilities ‘could’ rather than ‘could not’ do.

One source that may help to explain the lack of positive change in the survey data was the qualitative data. The first theme, *perceptions of disability*, showed students respected and admired the efforts of the athletes in the Paralympics, yet it was unclear if that respect carried over to all individuals with physical disabilities. The second theme, *depreciating disability* highlighted the need for teachers to recognize differences in the skills needed to play the sports rather than using the sports to simulate disability. The third theme, *disconnected sporting experiences* may explain the survey results. Because many of the students had little interaction with individuals with disabilities, including few students with physical disabilities in the school, students may feel the disability sports as had little relevance to their lives (Fitzgerald & Kirk, 2009). The results support a critical analysis of curriculum and pedagogical practices that underscores the importance of discussing skill differences and the construct of ability in order to bring a deeper meaning to the disability sporting experiences.

There is still evidence that there was *some* effect of the

disability sports unit on students' perceptions of disability. Prior to participating in the unit, many students were completely unaware of the existence of disability sports. Participating in the unit raised awareness for disability sports. Many students also reported an appreciation for the sports, especially when played at the Paralympics level. It also worked to re-define how they understood the skills needed to play the sports, as they reported being surprised by what the athletes could accomplish.

Limitations

There were various methodological issues that may have impacted the effectiveness of the unit. Ideally, the unit would have lasted for longer than three weeks. A longer, more developed unit featuring additional videos, more information about disabilities, and assessments that checked for student learning, would likely be more effective. Secondly, the survey questions may not have been ideally suited to the research questions nor the developmental age of the students. It is difficult to fully ascertain the impact of developmental levels on perceptions of disability in the fifth graders. Finally, the limited training of the teachers in the area of disability sports could have served as a barrier to richer discussions pertaining to ability, disability and differences.

Recommendations

Given this small sample group we make no claims for generalizability, but seek to provide connections for others incorporating disability sports in the curriculum. The findings would suggest that teachers versed in the skills necessary to play disability sports could provide their students with a knowledge base that could encourage a more diverse perspective by minimizing a deficit narrative (Barton, 2009). A disability sports unit is 396 a powerful teaching tool, and when properly implemented, can help to combat disablism among our society's youth.

References

- Bain, L. L. (1975). The hidden curriculum in physical education. *Quest, 24*, 92-101.
- Beckett, A. E. (2009). ‘Challenging disabling attitudes, building an inclusive society’: Considering the role of education in encouraging non-disabled children to develop positive attitudes towards disabled people. *British Journal of Sociology of Education, 30*(3), 317-329.
- Block, M. E., & Obrusnikova, I. (2007). Inclusion in physical education: A review of the literature from 1995-2005. *Adapted Physical Activity Quarterly, 24*(2), 103-124
- Campbell, F.K. (2009). Contours of ableism: *The production of disability and ableness*. New York, NY: Palgrave Macmillan. doi:10.1057/9780230245181
- Connor, D. L., & Gabel, S. L. (2013) ‘Crippling’ the curriculum through academic activism: Working toward Increasing global exchanges to reframe (dis)ability and education. *Equity and Excellence in Education, 46* (1), 100–118.
- Davis, L. J. (1997). *Constructing normalcy. The disabilities studies reader*. New York, NY: Routledge.
- Davis, R. W. (2012). Implementing paralympic sports in the general physical education curriculum. *Journal of Physical Education, Recreation, and Dance, 83*(3), 19-21.

- Davis, R., Rocco-Dillon, S., Grenier, M., Martinez, D., & Aenchbacher, A. (2012). Implementing disability sports in the general physical education curriculum. *Journal of Physical Education, Recreation & Dance*, 83(5), 35-41.
- Fitzgerald, H., & Kirk, D. (2009). Physical education as a normalizing practice: Is there a space for disability sport? In H. Fitzgerald (Ed.), *Disability and Youth Sport*, (pp. 91-105). London: Routledge.
- Godeau, E., Vignes, C., Sentenac, M., Ehlinger, V., Navarro, F., Grand 422 Jean, H., & Arnaud (2010). Improving attitudes towards children with disabilities in a school context: a cluster randomized intervention study. *Developmental Medicine & Chile Neurology*, 52(10), 236-242.
- Grenier, M. (2007). Inclusion in physical education: From the medical model to social constructionism. *Quest*, 59(1), 298-310.
- Grenier, M., Wright, S., Collins, K., & Kearns, C. (2014). "I thought it was going to be lame:" Perceptions of a disability sport unit in general physical education. *Adapted Physical Activity Quarterly*, 31(1), 49-66.
- Grenier, M., & Kearns, C. (2012). The benefits of implementing disability sport into physical education: A model for success. *Journal of Physical Education Recreation and Dance*, 83(4), 24-27.
- Haegele, J., & Hodge, S. (2017). Current practices and future directions in reporting disability in school-based physical education research. *Quest*, 69(1), 113-124. doi.org/10.1080/00336297.2016.1165122
- Ison, W., McIntyre, S., Rothery, S., Smithers-Sheedy, H., Goldsmith, S., Parsonage, S., & Foy, L. (2010). 'Just like you': A disability awareness program for children that enhanced knowledge, attitudes and acceptance: Pilot study finding. *Developmental Neurorehabilitation*. 13(5), 360-368. doi:10.3109/17518423.2010.496764
- Jeffries, P. R. (2005). A framework for design, implementing, and evaluating simulations used as teaching strategies in nursing. *Nursing Education Perspectives*, 26, 96-103.
- Keddie, A. (2012). Schooling and social justice through the lens of Nancy Fraser. *Critical Studies in Education*, 53(3), 263-279.
- Kirk, D. (1988). *Physical education and curriculum study: A critical introduction*. London: Croom Helm.
- Kirk, D. (1999). Physical culture, physical education and relational analysis. *Sport, Education and Society*, 4(1), 63-73.
- Krahe, B., & Altwasser, C. (2006). Changing negative attitudes towards persons with physical disabilities: an experimental intervention. *Journal Of Community & Applied Social Psychology*, 16(1), 59-69.
- Lee, T., & Rodda, M. (1994). Modification of attitudes toward people with disabilities. *Canadian Journal of Rehabilitation*, 7(4), 229-238.
- Leo, J., & Goodwin, D. (2014). Negotiated meanings of disability simulations in an adapted physical activity course: Learning from student reflections. *Adapted Physical Activity Quarterly*, 31, 144-161. PubMed. doi:10.1123/apaq.2013-0099
- Lingard, B. (2005). Socially just pedagogies in changing times. *International Studies in Sociology of Education*, 15(2), 165-186.
- Lingard, B., & Keddie, A. (2013). Redistribution, recognition and representation: Working against pedagogies of indifference. *Pedagogy, Culture and Society*, 21(3), 427-447.
- Loovis, M., & Loovis, C. (1997). A disability awareness unit in physical education and attitudes of elementary school students. *Perceptual and Motor Skills*, 84(3), 768-770. doi.org/10.2466/pms.1997.84.3.768
- McKay, C., Block, M., & Park, J. Y. (2015). The impact of a Paralympic school day on students' attitudes toward inclusion in physical education. *Adapted Physical Activity Quarterly*, 32, 331-348.
- Penney, D., & Hunter, L. (2006): (Dis)Abling the (health and) physical in education: ability, curriculum and pedagogy. *Sport, Education 468 and Society*, 11(3), 205-209. doi.10.1080/13573320600813358.
- Rieser, R., & Mason, M. (1990). *Disability equality in the classroom: A human rights issue*. London: ILEA. ■