

STEELE, RICHARD L., Ed.D. Community College Physical Education Faculty Perspectives about Teaching Students with Physical Disabilities. (2020)
Directed by Dr. Pam K. Brown and Dr. Erin J. Reifsteck. 54 pp.

Higher education physical education programs and courses are in a unique position to help all students, including those with disabilities, meet the recommended levels of physical activity (Stapleton, Taliaferro, & Bulger, 2017). Since promoting physical activity alongside able bodied peers may also have profound social benefits for college students with physical disabilities (SPD) (Devine, 2016; Dysterheft, Lindahl-Lewis, Hubbard, Jones, Rice, and Rice, 2016), disability inclusion should be addressed in these courses. Unfortunately, major barriers to successful disability inclusion may exist if instructors do not have adequate disability-related training or if courses limit participation (Braga, Tracy, & Taliaferro, 2015). There is also limited information on the extent to which physical education programs are meeting the needs of these students at any level of higher education (Allar, Baek, & Taliaferro, 2014).

To begin addressing this gap, the purpose of this study was to explore how physical education faculty perceive physical disability inclusion within courses offered by a large Mid-Atlantic community college system. This was accomplished using a mixed-methods approach that included surveying faculty ($n = 26$) about their attitudes, classroom experiences, prior training, and professional experience specific to SPD. Interviews were conducted with faculty ($n = 3$) to gain additional information regarding their perceived barriers to course participation for SPD and the types of resources and practices they use to provide inclusive physical education. The website for each participating college also was reviewed for publicly available information on disability accommodations to examine if the school's policies and accommodations process make specific mention of physical education courses.

Results showed that 88.5% of survey respondents believed they had a critical role in providing accommodation for SPD in their courses, 65.4% used a variety of course modifications

to meet the needs of SPD, and 42.3% believed physical activity courses could have added social and psychological benefits for SPD. However, many respondents (57.7%) reported that they have never completed disability accommodation training, may not understand legal definitions of physical disability (50%), and described issues with accessibility and/or lack of adapted equipment at their college (23%). Interviews supported results from the survey, with faculty suggesting their colleges lacked accessibility and adapted equipment. Each interviewee also provided insight into resources and teaching practices that can be used to promote physical disability inclusion (e.g. chair yoga) and perceived that accommodations documents provided by their college did not include necessary information to properly modify physical activity for SPD. Further, the review of online policies did not provide specific information to guide faculty in making accommodations in physical education courses.

These findings suggest faculty have positive attitudes toward teaching SPD, but there are potential environmental and policy barrier to the successful inclusion of SPD in these community college physical education courses. To overcome these barriers, faculty need training on disability accommodations and strategies to promote inclusive physical education practices.

COMMUNITY COLLEGE PHYSICAL EDUCATION FACULTY PERSPECTIVES
ABOUT TEACHING STUDENTS WITH PHYSICAL DISABILITIES

by

Richard L. Steele

A Dissertation Submitted to
the Faculty of The Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

Greensboro
2020

Approved by

Committee Co-Chair

Committee Co-Chair

APPROVAL PAGE

This dissertation, written by Richard L. Steele, has been approved by the following committee of the Faculty of The Graduate School at the University of North Carolina Greensboro.

Committee Co-Chair _____

Committee Co-Chair _____

Committee Member _____

Date of Acceptance by Committee

Date of Final Oral Examination

TABLE OF CONTENTS

	Page
LIST OF TABLES.....	iv
CHAPTER	
I. PROJECT OVERVIEW	1
Relevant Literature	2
Purpose Statement.....	6
Methods	7
Results.....	10
Discussion and Implications	16
II. DISSEMINATION	21
Recommendations to Promote Physical Disability Inclusion in Community College Physical Education Courses	21
III. ACTION PLAN.....	31
Short-Term Actions	31
Long-Term Actions.....	32
REFERENCES	34
APPENDIX A. FACULTY SURVEY	38
APPENDIX B. SUMMARY OF SURVEY MODIFICATIONS	46
APPENDIX C. INTERVIEW QUESTIONS.....	49
APPENDIX D. RESEARCHER PERSONAL BIOGRAPHY	50
APPENDIX E. EXECUTIVE SUMMARY	54

LIST OF TABLES

	Page
Table 1. Summary of Academic Preparation and Prior Disability Training.....	11
Table 2. Classroom Experience with Disability Accommodations	12
Table 3. Faculty Attitudes toward Disabilities and Accommodations.....	15
Table 4. Universal Design for Instruction and Inclusive Physical Education.....	27

CHAPTER I

PROJECT OVERVIEW

Promoting physical activity (PA) alongside able-bodied peers can have profound social benefits for college students with physical disabilities (SPD) (Devine, 2016; Dysterheft, Lindahl-Lewis, Hubbard, Jones, Rice, and Rice, 2016). These potential benefits are important to consider as the number of students with all forms of disability attending U. S. colleges and universities has been continually increasing over the last several decades (Barfield, Bennett, Folio, & Killman, 2007; Sniatecki, Perry, & Snell, 2015) and has reached 20% of total enrollment among community colleges (American Association of Community Colleges, 2019). A large portion of this enrollment growth consists of SPD. The most recent U. S. Census reported that these students represent almost 6% of the undergraduate population (Brault, 2012). With this growth, faculty across all disciplines need to be better prepared to assist students with all forms of disability through proper training (Becker & Palladino 2016; Park et al., 2012; Sniatecki et al., 2015; Zhang et al., 2010). Within the discipline of kinesiology, departments must work to ensure that programs and courses provide the necessary basic accommodations as required by the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973 to avoid discrimination (Barfield et al., 2007). In response to the ever-changing environment within higher education, there has been a direct call for the discipline to promote disability inclusion by viewing disability in a social-cultural context within scholarly study and professional practice (DePauw, 2000). It has also been recommended that higher education physical education programs make it a priority to adopt inclusive teaching approaches to help provide the growing number of students with all forms of disability with opportunities to participate in and meet the recommended levels of PA

(Stapleton, Taliaferro, & Bulger, 2017). The needs of SPD in these programs can be met using inclusive practices that focus on opportunities to participate, appropriate environments, and properly designed instruction (Allar, Baek, & Taliaferro, 2014). Unfortunately, there is limited information on the extent to which these physical education programs are meeting the needs of these students (Allar et al., 2014). This issue may be especially relevant in the community college context because physical education faculty may lack the resources and training needed to provide inclusion for SPD. Examining the attitudes, training, and experiences that community college physical education faculty have specific to teaching SPD can help address this gap.

Relevant Literature

The college years are a critical time for all students to develop and maintain positive lifestyle behaviors to promote their health and wellness (Adams, Graves, & Adams, 2006). As a result, postsecondary courses in health-related fitness and PA are extremely important and often help students recognize many of the potential negative lifestyle behaviors (e.g. poor dietary decisions, reduced PA, failure to manage stress) associated with the traditional college lifestyle (Adams et al., 2006). These courses may be even more important for SPD to help avoid future health problems because adults with disabilities are three times as likely to develop cancer, diabetes, heart disease, and stroke, and 41.7% have high blood pressure (CDC, 2019). Because of their mobility limitations, adults with physical disabilities are the least physically active segment of the U. S. population (Carroll et al., 2014). Similarly low participation rates have been observed for SPD (Dysterheft et al., 2018). This lack of PA participation is likely due to several environmental barriers (e.g., accessibility of sport facilities, cost, and transportation) and personal barriers (e.g., low motivation, lack of energy, and limited PA experiences) (Jaarsma, Dijkstra, Geertzen, & Dekker, 2014). SPD may also face barriers in physical education courses related to inadequately trained instructors (e.g., adjuncts) and courses that limit their participation (Braga,

Tracy, & Taliaferro, 2015). These barriers can be alleviated by providing students with appropriate support, services, and accommodations. Knowledgeable faculty are in the position to help reduce these barriers if they can make accommodations by modifying rules, equipment, and instruction to meet the needs of these students (Allar et al., 2014).

Social Model of Physical Activity and Disability

Disability is a complex phenomenon that reflects how a person's body interacts with societal norms (World Health Organization, 2019). In other words, there is a social aspect to disabilities that is marked by how someone with a disability sees themselves and how others view their disability. Historically, participation in PA by those with disabilities has been viewed from a medical or biological model (DePauw, 2000; Fitzgerald & Long, 2017). This model focuses on disability as an impairment, where people with disabilities are stigmatized and viewed with a victim status (DePauw, 2000), as inferior or abnormal (Kissow, 2015), or as having experienced a personal tragedy that limits their ability and quality of life (Fitzgerald & Long, 2017). Essentially, this model leads to exclusion or separation because it views people with disabilities as not being capable of normal participation in PA. This had been the dominant model in society, as well as in the research and practice within kinesiology, that led to the development of specialized K – 12 adapted physical education and separate disability sports programs (DePauw, 2000).

Over the last several decades, there has been a shift away from the medical model of disability toward a social justice perspective (Fitzgerald & Long, 2017). Because of this shift, a newer social model of PA and disability has emerged (DePauw, 2014). A key aspect of social justice is to open formerly unavailable opportunities to historically marginalized groups (Devine, 2016). The focus of this model is not on disability as an impairment, but on what environmental factors within society (or physical activity) create disabling and restrictive barriers (Fitzgerald & Long, 2017). The goal of this model is to promote social inclusion by removing the

environmental and personal barriers that make it difficult for people with disabilities to participate in PA. By promoting positive attitudes toward disability, these barriers can be reduced and lead to greater social interaction and participation in life activities (Kissow, 2015) and PA (Devine, 2016). Although potential challenges arise when various activities are based on able-bodied norms (e.g., unwillingness of able-bodied peers to participate using modified rules), the social model strives for integration of individuals with disabilities.

Specific to physical disabilities, recent research has pointed to the potential social benefits PA participation can have in other areas of life. Kissow's (2015) systematic review of fourteen studies focused on the significance of PA participation to the everyday life of adults with physical disabilities and SPD. Six major themes emerged in the review: increased socialization through sport, being part of a community, reducing a negative culture of disability (i.e., greater disability acceptance in society), reducing disability stigmas in an able-bodied society, improved perceptions of identity, and disability maintenance and personal independence. Although there has been a large amount of research examining the perceptions of, and barriers to, physical activity in adults with various disabilities, there remains a substantial lack of research specifically addressing the issues that SPD face within higher education settings (Dysterheft et al., 2016; Dysterheft, Chaparro, Rice, & Rice, 2018).

Within higher education settings, students with general disabilities (Devine, 2016) and physical disabilities (Dysterheft et al., 2016) have reported social benefits while participating in non-academic campus recreation programs. Students in these settings do not want to be singled out as different because of their disability (Devine, 2016). While students note facilitators to participation similar to adults (e.g., accessible facilities, improve personal well-being), social inclusion appears to be a key goal and facilitator to PA participation of students with disabilities that is greatly influenced by positive attitudes and support from peers and recreation staff

(Devine, 2016; Dysterheft et al., 2016). While many colleges and universities offer fitness centers and other recreational activities, it is unclear how many SPD actually utilize these resources. A systematic review of available literature also suggests there may be a lack of appropriate recreational programs (e.g., adapted equipment, accessible facilities) available to SPD that leads to poor rates of participation (Titus, Young, Nassen, & Ownhouse, 2016). Given the prevalence of SPD among the undergraduate population, there is a clear need to examine ways physical education courses can increase their engagement in PA.

Faculty Role in Accommodation and Inclusion

Higher education faculty have a crucial role in ensuring that students with disabilities receive a quality education (Zhang et al., 2010). When reviewing the available research on university faculty and accommodations, Zhang et al. (2010) identified four major factors that impact faculty willingness to provide quality services in the classroom: faculty personal attitudes regarding students with disabilities, faculty knowledge of legal requirements, perceived institutional support, and faculty level of comfort in interacting with students with disabilities. More recent research has consistently shown that higher education faculty generally hold positive attitudes toward students with disabilities, accommodations, and inclusive teaching practices (Becker & Palladino, 2016; Black et al., 2014; Gawronski et al., 2016; West et al., 2016). This may be particularly true if faculty have completed workshops and/or coursework related to disability accommodations (Sniatecki, Perry, & Snell, 2015) or have developed essential knowledge and skills through academic preparation or teaching within a College of Education (Becker & Palladino, 2016; West et al., 2016). However, few if any studies have addressed these factors specific to physical education faculty in higher education settings.

Although these factors have been examined in recent literature related to physical education, the focus of the research has been limited to K-12 teachers. A systematic review of this

literature found that in-service and pre-service physical education teachers who have positive attitudes toward students with disabilities and accommodations often demonstrate greater academic preparation, more teaching experience, higher perceived competence, and receive support from their schools (Qi & Ha, 2012). While these teachers may have taken individual classes or completed an academic program infused with information on disabilities (DePauw, 2000), not all faculty who teach physical education courses at the college level have undergraduate or graduate degrees in physical education teaching. These courses within higher education are often taught by graduate assistants, adjuncts, coaches, and contract instructors who may have limited training in how to teach students with disabilities (Braga et al., 2015). Additionally, community college faculty in particular often have substantial time constraints, which has been suggested as a major factor limiting their ability to provide disability accommodations (Berry & Mellard, 2002). Examining the attitudes, experiences, and prior training among community college physical education faculty will help to ensure meaningful PA experiences for SPD in this setting.

Purpose Statement

Community college physical education course instructors are in a unique position to promote the physical, psychological, and social wellbeing of SPD by using inclusive practices. There is a critical need to examine the barriers to physical disability inclusion at this level and if faculty are adequately prepared to provide these benefits. The purpose of this study was to explore how physical education faculty perceive physical disability inclusion within courses offered by a large Mid-Atlantic community college system. Specifically, the aim of the study was to describe the attitudes, experiences, and prior training that these physical education faculty have about teaching SPD. Understanding these faculty variables is important to identifying disability

training needs and can inform recommendations to ensure community college physical education courses are meeting the needs of SPD.

Methods

To accomplish the purpose and aim, this study used a mixed-methods research approach that included an online faculty survey and individual interviews to gather preliminary insight into faculty attitudes, experiences, and training related to teaching SPD.

Participants

Physical education faculty were recruited from a large Mid-Atlantic community college system. A review of the online schedule of classes for Fall 2019 at each location showed that a wide variety of physical education courses were currently being offered at 20 colleges with a total of 117 full-time and adjunct faculty. After obtaining site approvals, 105 active course instructors from 19 participating colleges were invited to complete the survey. Upon termination of the survey, 30 faculty submitted responses (response rate = 28.57%). Four responses were excluded because they did not complete the entire survey. The completed responses ($n = 26$) were from female ($n = 15$) and male ($n = 11$) faculty ranging in age from 26 to 66 ($M = 48.15$, $SD = 11.83$). Responses predominately came from adjunct faculty ($n = 22$) and the majority of participants ($n = 21$) identified as White (not of Hispanic origin). On average, participants had 10 years ($M = 10.04$, $SD = 7.66$) of teaching experience at the community college level. The most commonly taught courses were Fitness and Wellness ($n = 18$), Weight Training ($n = 13$), and Yoga ($n = 6$). The breakdown for academic rank was: Instructor (53.8%), Assistant Professor (7.7%), Associate Professor (23.1%), and Professor (15.4%). Interview participants ($n = 3$) were adjunct faculty from three different colleges within the system. Sara has instructed physical education courses for 12 years and has six years of professional fitness experience. Amy has been an occupational

therapist for 7 years and is an assistant professor who has taught courses for 10 years. Beth is an associate professor who has taught physical activity courses for 17 years.

Measures and Procedures

Following Institutional Review Board approval, faculty were recruited to participate in the study via invitations sent to their faculty email accounts. Data sources used to address the aim of the study included faculty surveys, faculty interviews, and institutional policy documents.

Faculty Surveys. This study used a modified version of the *Faculty Perspectives about Teaching and Working with Students with Disabilities* survey (Becker & Palladino, 2016). This instrument was designed to assess university faculty attitudes and experiences related to all forms of disability, their general awareness of the ADA and student accommodations, previous related training, and general information about their teaching approach. With proper modifications to the wording of the survey, colleges and universities can use the tool to target specific groups of faculty to identify professional development needs (Becker & Palladino, 2016). For this study, the survey was modified for use with community college faculty who instruct physical education courses. Initial changes to the survey were piloted with a small group of these faculty; based on this work, the final survey (see Appendix A) was further modified to include more demographic information and additional open-ended questions related to experiences specific to teaching SPD. See Appendix B for a description of the survey modifications. The survey was administered online through Qualtrics over a 3-week period in November 2019. Due to an initial low response rate, the survey was re-opened from December 2019 through January 2020.

Interviews. When the final survey responses were analyzed, the majority ($n = 13$) of faculty reported various barriers that impacted their ability to meet the needs of SPD. Semi-structured interviews were subsequently conducted to confirm this information and discover potential resources and solutions that could be used to inform recommendations to promote

physical disability inclusion. Specifically, two main questions (Appendix C) were designed to: 1) Gain a more in-depth understanding of the challenges and barriers faced by faculty and SPD in physical education courses, 2) Determine any useful resources they use that could help other faculty, and 3) Inquire about real-time practices they use to approach issues and challenges. Participants interested in participating in the follow-up interview provided their contact information at the end of the online survey. Seven participants provided contact information, with three subsequently agreeing to participate in the interview. The interviews were conducted and recorded using the Zoom video conferencing platform and ranged in length from 19 to 32 minutes. Each interview was transcribed using an online transcription service. Identifying information was removed and participants were given pseudonyms. Transcripts were then sent to participants, along with a summary of the conversation, to conduct member checking to ensure they accurately reflect their intended responses. All participants confirmed the transcripts and summary accurately represented their intended perspectives.

Policy Review. The website for each participating college was reviewed for publicly available information on disability accommodations to examine if the school's policies and accommodations process make specific mention of physical education courses.

Data Analysis

Survey data were downloaded into SPSS and analyzed using descriptive statistics. Open-ended responses from the survey were grouped into major categories based on similar responses and key words. Interview responses were reviewed and coded deductively into barriers, resources, and practices in line with the purpose of the interviews. Specific quotes from these interviews were used to support and add to survey responses.

Several strategies were used to promote trustworthiness. Member checking was used with interview analysis to ensure accuracy and credibility of interpretations (Creswell, 2013; 2014). By

using multiple data sources, triangulation was used to corroborate evidence to shed light on faculty perspectives (Creswell, 2013). The researcher acknowledges his personal and professional experiences were central in developing the purpose and process of this research. To clarify researcher bias (Creswell, 2013; 2014), a positionality biography can be found in Appendix D.

Results

The results are presented below in three sections based on the aim of the study: Professional Experience and Prior Training, Classroom Experiences, and Attitudes.

Professional Experience and Prior Training

Table 1 provides an overview of the academic preparation and prior disability training among surveyed faculty. Less than a third of the participants held academic degrees specific to physical education teaching and well over half responded never having received any disability training. Those surveyed averaged 19.88 years ($SD = 9.69$) of professional experience outside of their teaching role that ranged from 2 months to 35 years, including experience in athletic training, corrective exercise, coaching, special education, yoga, dance, exercise instruction, and physical education teaching. Responses to an open-ended survey question about how this prior experience influenced their ability to include SPD in their classes suggested that their experiences helped them learn about the rights of students with disabilities, understand their faculty role, improve their communication skills, and gain practical skills needed to make PA modifications specific to their teaching area. The three interviewed faculty also described that their professional experience provided them with support systems that they use to help plan their courses. Those systems included knowledgeable professional contacts and professional organizations (e.g. International Association of Yoga Therapists), which they found to be good sources for useful information regarding disability.

Table 1. Summary of Academic Preparation and Prior Disability Training

	# Responses	% of Sample (<i>n</i> = 26)
Academic Preparation		
Degree in Kinesiology/Health Related Fields	19	73.07
Specific to K-12 Physical Education	8	30.76
Degree in Other Fields	7	26.92
Prior ADA or Disability Training		
Never taken a class, workshop, or seminar	15	57.69
Taken a course, workshop, or seminar:	11	42.31
Within academic preparation	4	15.38
At their community college	4	15.38
Within their profession	2	7.69
For role as k-12 PE teacher	1	3.84

When asked about their interests in additional training on ways to improve physical education courses for SPD, most (*n* = 21) indicated an openness to additional training to gain more knowledge and improve their courses. Some (*n* = 7) specifically stated they would like to learn methods to modify PA to assist those with physical disabilities (e.g., wheelchair yoga, limb amputations) as well as those with other limitations (e.g., learning disabilities, depression).

Classroom Experiences

Table 2 provides an overview of survey responses to questions related to classroom experience with disability accommodations. While most respondents had experiences with accommodation documents (*n* = 20) and communicating with those students (*n* = 17), only three reported having contacted their disability services office to discuss the student’s plan. When asked to reflect on the disabilities represented in a recent accommodation request, the most common types of disabilities noted were specific learning disabilities (*n* = 13), followed by physical disabilities (*n* = 10) such as physical impairments (e. g. wheelchair bound) and orthopedic impairments. The most common types of accommodations recommended in these documents were extended time on tests (*n* = 15) and extended time for assignments (*n* = 14).

Table 2. Classroom Experience with Disability Accommodations

	Yes	No
1. Have you ever encouraged a student in any of your physical activity classes to seek services at your college's office responsible for students' disability accommodations?	14	12
2. Have you had a student in a physical activity class present you with documentation from your college's office responsible for students' disability accommodations, indicating his/her need for accommodations?	20	6
3. Did you have a conversation with the student about how you could accommodate her/his needs?	17	3
4. Did you contact the staff at your college's office responsible for students' disability accommodations to discuss the student's accommodation plan?	3	17
5. Did you feel as though you had enough information and/or resources to accommodate the student's needs in your physical activity class?	16	4

Note: Questions 3-5 asked faculty who responded "Yes" to question 2 to reflect on one recent accommodation request.

When faculty were asked to reflect on their teaching experience to describe physical disabilities they have observed (not necessarily documented) in their classes, the majority ($n = 18$) gave appropriate examples of physical disabilities (e.g., wheelchair bound, limb amputations, neurological disorders). However, many ($n = 13$) also listed other limitations (e.g., visual and hearing impairments, learning disabilities, autism) that would fall into different disability categories. Faculty were also asked if they had ever adapted in-class PA for a student with a physical disability and to describe the methods they used. Faculty ($n = 18$) made in-class modifications that fell into three main categories: modifications to PA, changes to classroom instruction, and adjustments to course requirements. First, many ($n = 15$) made modifications to assist those with disabilities by using specialized equipment, adjusting levels of difficulty in activities (e.g., various difficulty levels of push-ups and planks), and providing modifications for dance and those in wheelchairs. Sara, who was a former special education teacher and had outside

experience instructing adapted volleyball, described in her interview how she uses sitting volleyball with beach balls as part of all her classes so all students can learn to enjoy the sport. Similarly, Beth discussed in her interview how her extensive experience as a yoga instructor helped her learn how to modify yoga for everyone. For SPD, she stated, “I just modify all the poses in my class and offer them chairs if needed.” She also said she likes to have all students use chairs regardless of their physical abilities “to see the value” that yoga can have for everyone. Changes to classroom instructions were also apparent as some ($n = 6$) survey respondents stated that they were more direct with instructions, gave more time for assignments, and were more “accepting, praising, and encouraging” to the students. Lastly, five faculty responded that they make adjustments to the physical requirements to create a less competitive atmosphere. As one respondent explained, “We do not focus on goals, but instead on each student’s individual progress. I stress from the start, no expectations and no competition with others or self.”

Surveyed faculty were also asked to describe potential barriers to promoting student success among SPD. Eight responded that they have not observed any barriers to their ability to teach these students. The remaining faculty described four key barriers including the inability to accommodate all students because of class size ($n = 2$), a lack of understanding of disabilities and appropriate teaching strategies ($n = 3$), limited participation by students because of perceived disability stigma ($n = 2$), and a lack of proper accessible facilities and equipment ($n = 6$). Beth discussed in her interview how the building where classes were held was older and generally inaccessible because it did not have ramps and the automated doors were often out of order. She also discussed how the department had limited funds for yoga supplies, and because of that, these supplies were often donated or made. In contrast, Sara described that her courses were held in a newer building that is very accessible, and her department had enough funds to make recent equipment purchases. While Amy’s college held their classes in a relatively new and accessible

building, she noted that the campus fitness center layout had tight spaces that made moving around difficult for those in wheelchairs or other devices. She also described that the campus fitness center has a variety of equipment that was “enough to be creative,” but did not have specific adapted equipment (e.g., hand bike for those with lower-limb limitations).

When the websites for each participating college ($n = 19$) were reviewed for policies and procedures for disability accommodations, each college provided information that was easily found through their search function. This information provided a detailed description of how students can request accommodations, the nature of available ADA academic accommodations, and directions for the student to present their accommodation document to their course instructors. However, none of the websites included any information specific to accommodations for physical education courses. Although the majority ($n = 16$) of survey respondents believed that a recently received accommodation document provided enough information to assist the student, this belief was not shared by interviewees. When asked if these documents are useful to help SPD in their courses, Beth, Sara, and Amy indicated that the documents may be another potential barrier for physical disability inclusion. Their respective responses were, “The letters are worthless to physical activity modification,” “I don’t think any letters will do a person justice,” and that, “It’s usually a blanket letter, you know, there’s a couple of boxes that are checked, that does not necessarily apply to a physical education class.” Amy, who has been an occupational therapist for seven years, explained the importance of faculty having an understanding of a student’s disability in order to make appropriate accommodations: “I feel like understanding the disability and the nature of the disability itself is important. Having that knowledge of what that actual disability is, will in turn help that professor know how to adapt those courses.”

Attitudes

Table 3 shows frequency of responses related to faculty general attitudes toward students with all disabilities and ADA required accommodations. These responses show that the majority of faculty believe that students with disabilities should be able to fully participate in college life ($n = 21$) and that disability accommodations are fair to other students ($n = 23$). However, some ($n = 10$) were neutral to the question “Faculty should make academic adjustments for students with disabilities”. To assess faculty attitudes specific to SPD, the survey included the question “What do you feel are the benefits of physical activity courses for SPD?” The responses were grouped into three main categories. First, respondents ($n = 9$) felt SPD could get the same benefits as able-bodied students. These benefits included: stress reduction, health benefits, exposure to new activities, and helping students to become “more focused with tasks, sleep better and feel energized for other subjects during the semester.” The second category included benefits related to social inclusion. Some ($n = 6$) responded that these classes can help provide positive social interactions and “help them realize that they can participate in classes at their level and ability.” The third category consisted of respondents ($n = 5$) who believed that these classes can have mental health benefits for students by helping to improve confidence, sense of personal accomplishment, general positive outlook, and personal acceptance of their disability.

Table 3. Faculty Attitudes toward Disabilities and Accommodations

	SA	A	N	D	SD
1. Students with physical or mental disabilities should be able to fully participate in college life.	14	7	4	0	1
2. Faculty should make academic adjustments for students with disabilities.	9	7	10	0	0
3. Having interpreter in my class could be distracting for other students and/or myself	1	2	5	10	8
4. Students with disabilities are reluctant to disclose their disabilities.	1	10	9	6	0
5. As an instructor, I think special course	0	0	3	15	8

	accommodations for students with disabilities are unfair to other students in the class.					
6.	I am concerned that other students in my class might think special course accommodations for students with disabilities are unfair.	0	1	1	19	5
7.	Students with learning disabilities are able to perform as well as other students at the college.	7	8	6	4	1
8.	Many students with disabilities expect special treatment.	0	2	9	14	1

Note: SA = Strongly Agree, A = Agree, N = Neutral, D = Disagree, SD = Strongly Disagree

Faculty also described an understanding of their important role in promoting the success of SPD in their classes. One respondent believed their most essential role was “to offer support, understanding, guidance, and most importantly, open communication.” Similar attitudes were represented throughout the responses as several faculty ($n = 11$) described that their role was to make accommodations to meet the needs of these students. These faculty accomplished this by reviewing accommodation documents, having open communication with students about their needs, respecting their privacy, providing encouragement (e.g., “To make them feel that they can do it”), giving resources to be successful, and planning/providing necessary accommodations based on the student’s ability level. Some faculty ($n = 7$) also described that their role was to foster inclusion and engagement in their classes. They wanted to make students “feel like they are part of the class” by focusing on safe participation, personal improvement, and encouraging non-judgmental classroom environments. Similarly, Beth explained that she tries to “foster a sense of community in my classes” to make all students feel welcome.

Discussion and Implications

The aim of the study was to explore the attitudes, experiences, and previous training that community college physical education faculty have about teaching SPD. This is the first known examination of issues related to physical disability inclusion in physical education courses at the community college level. A key facilitator to promoting inclusion in higher education courses is

faculty who have positive attitudes toward students with disabilities (e.g., believing students should be part of the college experience), make appropriate accommodations (e.g., making sure the classroom is arranged properly), and engage in inclusive teaching practices (e.g., high expectation for all students) (Becker & Palladino, 2016; Black et al., 2014; Gawronski et al., 2016; West et al., 2016; Zhang et al., 2010). The physical education faculty in this study demonstrated these positive attitudes as their overall responses indicated that they felt students should be included in the college experience, understood the importance of their physical education courses for SPD, and showed a willingness to provide necessary accommodations.

However, research also shows that positive attitudes do not always lead to action in classrooms by applying inclusive teaching principles. Studies have shown that university faculty may have positive attitudes toward physical accommodations (e.g., making sure a classroom is set up for those with disabilities) but are not regularly using them (West et al., 2016). While research focusing on community college faculty attitudes is limited, Gawronski, Kuk, and Lombardi (2016) found that faculty at this level generally have positive attitudes and actions toward inclusive teaching methods such as accessible course materials, inclusive lectures, and multiple means of presentation. Some faculty in that study did demonstrate negative attitudes and actions toward accommodations, course modifications, and inclusive assessments. As these negative attitudes and actions would be detrimental to the success of SPD in physical education courses, it is very encouraging that these views were not shared by the majority of physical education faculty in the present study. Both survey and interview responses suggested that they are very willing to provide inclusion by modifying PA, course requirements, and instruction to promote the participation of SPD. However, this group represents a small sample that possessed extensive teaching and outside professional experiences within PA-related fields. These experiences are likely to have compensated for their overall lack of disability-specific training. These views may

also not be representative of all physical education faculty within this community college system, particularly faculty who are younger with less overall experience.

Two other key factors to providing inclusive opportunities in higher education physical education programs are accessibility of facilities and availability of appropriate equipment (Stapleton et al., 2017). In this study, close to a quarter of the faculty surveyed and two of three interview participants indicated that a lack of appropriate facilities and equipment were barriers to their ability to meet the needs of SPD in their courses. Because of the importance of these potential barriers, each college in the system should examine the accessibility of their facilities and adapted equipment needs for both on and off-campus courses. Resources should be directed as needed to address any shortcomings.

Lack of training specific to students with disabilities appeared to be an issue in this study. Only eight faculty reported having undergraduate or graduate degrees related to physical education teaching. Over half of the survey responses indicated that they had never taken a class, workshop, or seminar about disability accommodations. Similar to a study on university faculty (Sniatecki et al., 2015), these community college faculty may also demonstrate a gap in knowledge regarding the services offered by the disability services office at their college. Almost 50% of those surveyed have never encouraged a student to seek disability services, and of the 20 that indicated having experience with accommodations, 17 reported not having a conversation with disability services about the student's plan. There were also several neutral ($n = 10$) responses to the question, "Faculty should make academic adjustments for students with disabilities." These responses may indicate a lack of understanding of ADA requirements. Research among university faculty has shown that some may lack confidence in their knowledge of ADA and Section 504 laws and legal definitions of disability (West et al., 2016). The latter was evident in the present study as half of respondents listed other disability classifications (e.g.,

autism, learning disabilities) when asked to identify physical disabilities they have observed in their teaching experiences. This general lack of legal knowledge and awareness of issues faced by students with disabilities has been consistently seen in research (Zhang et al., 2010) and may be one of the most important barriers to providing needed accommodations (Sniatecki, Perry, & Snell, 2015). As a result, a major recurring theme in literature is that all faculty, even those with positive attitudes, need training to be better prepared to assist students with disabilities (Becker & Palladino 2016; Park et al., 2012; Sniatecki et al., 2015; West et al., 2016; Zhang et al., 2010).

There is a clear need to make sure all physical education faculty complete the basic ADA training provided by their college. This is particularly true as the online disability accommodation policies at the community colleges within this study do not provide guidance to students or faculty specific to physical education courses. However, this training would not provide physical education faculty the knowledge and skills needed to go beyond basic accommodations to properly modify physical activity for SPD. Similar to faculty at the university level (Sniatecki, et al., 2015; Zhang et al., 2010), community college faculty in this study had a strong interest in professional development to increase their knowledge and skills to provide inclusive physical education for students with all forms of disability. The difficult aspect this type of training is to find the best method to increase requisite knowledge and skills. While studies have not addressed this type of training for higher education physical education faculty, it is common in undergraduate and graduate physical education teaching preparation programs. For example, Sato and Haegele (2017) reported on a successful two semester graduate-level adapted physical education teaching licensure program. The two program courses were delivered in an online format and required mentorships to build knowledge and practical skills to more effectively teach their students. Although this type of program could be very useful for the physical education faculty at all levels, community college faculty may not have the time to complete such lengthy

programs and courses. The majority of participants in this study were adjunct faculty who are likely to have other professional and personal commitments. Higher costs would also put a strain on an institution's faculty professional development budget. Because of these factors, three suggestions are made for providing professional development opportunities to community college physical education faculty: 1) Faculty should be provided access to informational resources (e.g., journals, organizations) to help better serve their students, 2) Colleges should be encouraged to provide professional development funds for conferences, workshops, and certifications specific to inclusive physical education practices, and 3) New faculty should be assigned an experienced mentor to help build their practical knowledge and skills in inclusive physical education.

Limitations and Future Direction

While this study provides a snapshot into the attitudes, experiences, and training of physical education faculty within this community college system, the small sample size of faculty is a key limitation. It is possible that those who responded already cared about disability inclusion in their courses which contributed to the overall positive attitudes observed in the study. Although the survey was anonymous, it is possible that some faculty may not have participated because they perceived a risk to their employment if they provided negative responses. Future research should aim to increase the number and diversity of participants in order to conduct statistical comparisons based on relevant demographic characteristics (e.g., years teaching experience, academic training in physical education). Additional strategies should be used to promote a better response rate, such as including incentives and/or in-person visits to each college. Conducting more extensive interviews with both faculty and SPD could also help promote physical disability inclusion by providing broader insight into the faculty training needs at each college, gathering information on student needs and interests, and helping to identify any college-specific issues related to accessibility and equipment needs.

CHAPTER II

DISSEMINATION

The goal of this research was to explore faculty perceived physical disability inclusion in physical education courses offered within a large community college system. In order to use this information in a practical way to improve how the system is providing physical activity experiences to these students with physical disabilities, an important initial step will be to disseminate my findings to appropriate decision-making stakeholders within the system. This will be accomplished by submitting a report to each college in the system that will include Chapter 1 of my dissertation along with the following list of specific policy and faculty professional development recommendations. It is my belief and desire that this information can be used to improve the physical education course experiences of students with physical disabilities within this system. See Appendix E for a one-page executive summary that will be distributed to the colleges along with the full report.

Recommendations to Promote Physical Disability Inclusion in Community College Physical Education Courses

I, Richard Steele, recently conducted a research study among the physical education faculty within this community college system. The primary goal of this research was to explore how faculty perceive physical disability inclusion within the system's physical education courses. The study was conducted because there is growing research that supports the importance of physical activity experiences for college students with physical disabilities (Devine, 2016; Dysterheft et al., 2016; Kissow, 2015). Within community colleges, research has shown that recreational opportunities for these students are limited compared to 4-year institutions, likely due

to a lack of proper programming, budgets, facilities, and equipment. These limited opportunities make it vital to address physical disability inclusion in for-credit physical education courses at the community college level.

At the conclusion of my study, 26 faculty completed an online survey and 3 were directly interviewed to examine their attitudes, experiences, and prior training specific to students with physical disabilities. Their responses, along with a review of available literature, uncovered several ways to promote physical disability inclusion in community college physical education courses. Outlined here are five recommendations related to disability policy, faculty training needs, course design, course marketing, and accessible on/off campus facilities.

Recommendation 1: Encourage Student Enrollment and Communication

These community colleges should actively encourage and promote physical education courses to students with physical disabilities as part of the college experience and institutional goals for student wellness. These courses can help students gain the necessary skills and experiences to help promote not just life-long physical and psychological wellness, but also contribute to their social wellness. In the study, physical education faculty clearly understood that their courses could have important social benefits to students with physical disabilities. Faculty reported that these benefits included helping students: build confidence and a sense of accomplishment, feel like they are part of the class alongside able bodied peers, and believe they can be part of the college experience. The key is to benefit all students by removing the negative stigma often associated with physical activity and disability.

Some may argue that issues related to these courses are not important because many institutions in the U. S. have removed physical education requirements for graduation. While this has been a growing trend, many colleges and universities do still have requirements. Locally, out of the 54 four-year colleges and universities in North Carolina and Virginia, 34 (62.9%) maintain

physical education requirements for undergraduate students (Surratt, 2019). Even institutions that do not require these courses often offer them for elective credit or for personal enrichment.

It is also recommended that disability services offices encourage students with physical disabilities to speak with instructors about their needs. A key issue that the interviewed faculty and I have observed is that students are not required by the ADA to disclose their disability to faculty. Students are required to provide disclosure to the college, but the faculty member is only provided with a Memorandum of Accommodation (MOA) that outlines the basic accommodations that the student is entitled to receive. The ADA also prohibits faculty from directly asking a student about their disability. While it is recognized that these regulations are important to student privacy and academic success, they pose a major hurdle in physical education courses. Most (80%) of the surveyed faculty believed they had enough information from MOA's for disabilities in general. However, these faculty had extensive teaching and professional experience and reported encouraging students to have conversations with them in order to understand their specific needs and go beyond the basic accommodations. Faculty who were interviewed further described that MOA's do not provide the information needed to properly modify physical activity for students with physical disabilities. It has also been my experience that some accommodations, such as simply giving alternate assignments instead of physical activity participation, would not be consistent with ADA requirements as they would represent a fundamental change that would alter the content and purpose of a physical education course. By opening the lines of communication between faculty, students, and disability services, these issues can be alleviated to create the best possible environment for these students to experience the benefits inherent to physical activity.

Recommendation 2: Provide Accessible Facilities and Equipment

Two key aspects to providing inclusive opportunities in higher education physical education programs are accessibility and appropriate equipment (Stapleton et al., 2017). In this study, close to a quarter of the faculty surveyed indicated that a lack of appropriate facilities and equipment were barriers to their ability to meet the needs of students with physical disabilities in their courses. During interviews, one faculty member explained the building housing her physical education courses was very inaccessible because the older building didn't have ramps and the automatic doors were often inoperable. She also described that her department lacks the appropriate budget to purchase needed adapted equipment. Another interviewee indicated that the building she teaches in was new, but the fitness center layout and usability of equipment was not optimal for use by students with physical disabilities. Each college should examine their facilities and available equipment to ensure they are accessible for all students. Although not specifically addressed in the study, it is also suggested that the same accessibility and equipment considerations be evaluated for off-campus course locations.

To help address any potential issues, The North Carolina Office on Disability and Health has published an introductory guide entitled "Removing Barriers to Health Clubs and Fitness Facilities" that would be useful for on-campus fitness courses. The guide provides information on creating accessible spaces, exercise equipment layout, usability of equipment, and resources to find adapted equipment. A link to this guide can be found in the Resource List provided.

Recommendation 3: Require all Faculty to Complete Basic ADA Training

Research has shown that higher education faculty often report uncertainty about ADA requirements, a general lack of knowledge of policies and procedures regarding students with disabilities, and misconceptions about the services provided by disability services offices (Zhang et al., 2010). These barriers were evident in this study. While most of the faculty reported having

many years of outside professional experience they felt contributed to their ability to work with students with physical disabilities, over 57% of faculty who completed the survey reported never completing any type of course, seminar, or professional development about disability accommodations in college settings. Importantly, only 15% reported having disability training at their college. Almost half (46%) also responded that they have never encouraged a student to seek disability support services at their college. There may also be misunderstanding of disability definitions. When faculty were asked to reflect on their teaching experience to describe physical disabilities they have observed, 50% listed limitations like visual and hearing impairments, learning disabilities, autism, and depression that would fall into different disability categories and require varying accommodations. ADA training would be an important step to help physical education faculty become more capable of supporting students with a variety of disability concerns. The participants in this study were divided on the best way to deliver training (online vs. in-person), so each college should choose a method that suits the majority of their faculty.

Recommendation 4: Provide Education in Inclusive Physical Education Practices

Although ADA training provided by the college would provide faculty across many disciplines with a solid foundational knowledge of required accommodations needed to assist students with physical disabilities, it would do little to improve faculty skills specifically in modifying physical education courses to promote inclusion. Sometimes physical education course faculty do have specific training when it comes to inclusive practices. This is often the case if a faculty member has completed undergraduate or graduate coursework in adapted physical activity as part of a physical education teaching program. However, faculty who teach these courses often hold other physical activity and health-related degrees (e.g., kinesiology, exercise science, health promotion) that do not focus on teaching practices. In the referenced study, only 8 of 26 faculty members held degrees in physical education teaching.

Faculty with other degrees also need to gain knowledge in inclusive physical activity to better serve students with physical disabilities. One way to accomplish this is to assign all new faculty a mentor who is experienced in inclusive physical education practices to assist in designing and teaching their courses. While it would also be ideal if colleges were to support academic coursework in this area, this would not be the most feasible option for busy faculty who are often adjuncts with outside professional and personal obligations. This kind of coursework could also place strain on professional development budgets if tuition assistance is not available. It is recommended that faculty be supported through professional development for seminars, workshops, and certifications offered through professional organizations. An example would be the Certified Inclusive Fitness Trainer (CIFT) certification that is offered through a collaboration between the American College of Sports Medicine and the National Center on Health, Physical Activity, and Disability (NCHPAD). Resources should also be provided to improve faculty knowledge and skills. At the end of this report, a useful list of online resources is provided that faculty and administrators can use to access information on legal issues, organizations, certifications, equipment, facilities, fitness, and sports related to physical disabilities.

Recommendation 5: Provide Faculty Training in Universal Design for Instruction

While there are several ways disability inclusion can be promoted in higher education physical education courses, it has been suggested that using the principles of universal design (UD) in all courses would help meet the individual needs of all students (Stapleton et al., 2017). UD is "the design of products and environments to be usable by all people, to the greatest extent possible, without adaptation or specialized design" (The Center for Universal Design, n.d.). While UD has recently become recognized in federal policy as a widely accepted and encouraged inclusive educational framework in higher education, its application in community college settings is very new (Gawronski et al., 2016). The most used application of the nine principles of

UD (see Table below) in higher education is the relatively newer framework of universal design for instruction, or UDI (West, Novak, & Mueller, 2016). The goal of UDI is to focus on accessibility and the learning environment to apply UD principles to all aspects of course design and instruction to maximize learning for all students, including those with disabilities (Black et al., 2014; Burgstahler, 2017; West et al., 2016). UDI challenges instructors to go beyond basic legally required disability accommodations to incorporate inclusive practices (Burgstahler, 2017) that would greatly benefit students with physical disabilities in these courses. However, faculty would need training in the form of college provided professional development to become familiar with how to apply UDI. When asked in the survey if they were familiar with UD or UDI, most faculty ($n = 16$) were “not familiar.” This would make training on these principles critical to increase faculty awareness and reduce barriers to implementation (Black et al., 2014). It is suggested that if faculty can combine UDI with knowledge of inclusive physical education, they would be able to create the best possible physical activity environment for SPD. The table below outlines the principles of UD and how they are applied in UDI, as well as brief examples of how inclusive physical education awareness fits into the framework to promote physical disability inclusion.

Table 4. Universal Design for Instruction and Inclusive Physical Education

Universal Design (Black et al., 2015)	Universal Design for Instruction
1. Equitable use	Instruction is designed to be useful to and accessible by all students of all ability levels.
2. Flexibility in use	Provide choice in methods of use.
3. Simple and intuitive	Instruction is straightforward
4. Perceptible information	Effectively communicate information regardless of surrounding conditions or a student’s sensory abilities.

5. Tolerance for error	Instruction takes into account differences in individual learning pace and skills.
6. Low physical effort	Eliminate nonessential physical effort to allow maximum attention to learning.
7. Size and shape for approach and use	Design classes regardless of student's size, posture, mobility, and communication needs.
8. Community of learners	Promote interaction and communication between students and faculty.
9. Instructional climate	Create a welcoming and inclusive classroom with high expectations for all students.

Application of Inclusive Physical Education for Physical Disabilities within UDI

Equitable use Ensure accessible buildings, classrooms, and physical activity spaces. Budget for and provide needed adapted and accessible fitness and sport equipment. Examples include medicine balls, elastic bands and tubing, chairs for adapted sports, weight training machines designed for use by most, cable weight systems, and wheelchair anchors.

Flexibility in use: The instructor provides students with options to participate in various physical activities when appropriate based on their physical ability level.

Simple and intuitive: Avoid the unnecessary use of jargon and complex directions related to physical activity. Provide the appropriate guidance and feedback for all students during and after activity.

Tolerance for error: The instructor uses modified fitness and sports skill assessments. Grading is based on participation and personal effort rather than improvement or set standards.

Low physical effort: The instructor encourages physical effort inherent to the activity based on a student's individual needs and established guidelines.

Size and space for approach and use: The instructor uses modification to exercises, movement technique, game or sport rules, and guidelines into each class. Some examples include modified planks, modified push-up, chair Yoga, dance variations, and chair volleyball.

Community of learners: The instructor requires all students in the class to work together and help each other regardless of physical ability level.

Instructional climate: The instructor provided information on the benefits of physical activity for everyone. This information includes the benefits for those with physical disabilities in order to help reduce the negative stigma often associated with physical activity and disability. The focus is on enjoyment of the activity instead of competition.

Resource List

Legal, Accessibility, and Universal Design:

- Americans with Disabilities Act (ADA) <https://www.ada.gov/>
- ADA Guide to Disability Rights Laws <https://www.ada.gov/cguide.htm>
- DO-IT Center at the University of Washington <https://www.washington.edu/doi/>
- National Center on Accessibility <https://ncaonline.org/>
- The Center for Universal Design at North Carolina State University <https://projects.ncsu.edu/ncsu/design/cud/>
- North Carolina Office on Disability & Health. ‘Removing Barriers to Health Clubs & Fitness Facilities: A Guide for Accommodations All Members, Including People with Disabilities & Older Adults’
https://fpg.unc.edu/sites/fpg.unc.edu/files/resources/other-resources/NCODH_RemovingBarriersToHealthClubs.pdf
- The National Center on Health, Physical Activity, and Disability. ‘Discover Accessible Fitness: A Wheelchair Users Guide to Using Fitness Equipment’
<https://www.nchpad.org/discoverfitness/index.html>

Organizations:

- American Arthritis Foundation <https://www.arthritis.org/>
- American Association of Adapted Sports Programs <http://adaptedsports.org/>
- American Association on Disability and Health <https://www.aahd.us/>
- American College of Sports Medicine <https://www.acsm.org/>
- American Occupational Therapy Association <https://www.aota.org/>
- Aquatic Exercise Association <https://aeawave.org/>
- Disability Sports USA <https://www.disabledsportsusa.org/>
- Inclusive Fitness Coalition <http://incfit.org/>
- International Association of Yoga Therapists <https://www.iayt.org/>
- National Alliance for Accessible Golf <https://www.accessgolf.org/>

The National Center on Health, Physical Activity, and Disability (NCHPAD) <https://www.nchpad.org/>

US Adaptive Golf Alliance <https://www.usaga.org/>

Wheelchair Sports Federation <https://www.wheelchairsportsfederation.org/>

Yoga Alliance <https://www.yogaalliance.org/>

Certifications and Texts:

ACSM/NCHPAD Certified Inclusive Fitness Trainer
<https://www.acsm.org/get-stay-certified/get-certified/specialization/cift>

ACSM's Exercise Management for Persons with Chronic Diseases and Disabilities, 4th edition

Geoffrey Moore, J. Larry Durstine and Patricia Painter, editors.
www.humankinetics.com

Adapted Physical Education and Sport, 6th edition

Joseph Winnick and David Porretta
www.humankinetics.com

Disability Sport, 2nd edition

Karen DePauw and Susan Gavron
www.humankinetics.com

Inclusive Physical Activity: Promoting Health for a Lifetime, 2nd edition

Susan L. Kasser and Rebecca K. Lytle
Human Kinetics
www.humankinetics.com

These recommendations and resources provide evidence-based ways to promote physical disability inclusion. It has also been my experience that faculty with more teaching and professional experience, like the ones represented in this study, are better equipped to provide physical disability inclusion. Because of this, it is recommended that college administrators examine the feasibility of including physical disability inclusion in the hiring and evaluations for our faculty. Physical education courses can have substantial benefits for these students, and providing them with the best possible physical activity experiences should be a primary focus. I welcome the opportunity to meet to discuss these recommendations or answer any questions.

CHAPTER III

ACTION PLAN

The immediate dissemination will be to submit a final report to all colleges within this community college system that currently offer physical education courses. This report will include an executive summary, research findings, discussion of implications, recommendations, and an invitation to meet and discuss my research. The report will be emailed to the respective IRB directors, as well as to the deans and department heads responsible for physical education courses each college. Chapter 1 of my dissertation, along with specific college policy and faculty training recommendations from Chapter 2 will be submitted as part of this final report.

It is my hope that this research could lead to very near-term improvements in how this community college system serves students with physical disabilities in physical education courses. The director of disability services offices at each college will also receive the report and invitation to meet. It is important that disability services offices understand the impact physical activity courses could have if faculty have the proper information and training. This understanding could help bridge the gap between required disability accommodations and what is needed to promote physical disability participation and inclusion in physical education courses. This could potentially foster open communication that may lead to more information, resources, and specialized training for physical education faculty in the future.

Short-Term Actions

The physical education and personal health disciplines within this community college system hold a centralized multi-day discipline meeting every October. A request will be made to be a presenter at this meeting. The intent of this presentation will be to convey my research

findings and recommendations, and include some interactive opportunities for faculty to gain experience in inclusive practices (e.g., demonstrations of modified activity, group case studies). The goal will be to foster open dialog among faculty regarding training needs and other ways to better serve students with physical disabilities.

Efforts will also be made to disseminate my research through peer-reviewed publication. This is an important issue at all colleges and universities that offer physical activity courses. Throughout my research, two major journals appeared that published research related to physical disabilities, inclusion, and higher education courses. Those journals were the *Journal of Postsecondary Education and Disability* and *Adapted Physical Activity Quarterly*. Efforts will first be made to submit my research for review and possible publication in journals like these.

Long-Term Actions

I believe that my future research among the physical education faculty within this community college system should be more focused on qualitative interviews. This would be done through on-campus visits to each college. During these visits, more detailed interviews could be conducted with faculty to gain a broader understanding of their attitudes, experiences, and prior training. Interviews could also be conducted directly with students in order to include their voice in recommendations to promote physical disability inclusion. Their perspectives (e.g., what courses interest them, what environmental barriers they have observed, why they have or haven't taken physical education courses, what they have liked or disliked about courses they've taken) would provide important information to inform future recommendations. These visits would also provide the opportunity to get a first-hand evaluation of the facilities and equipment at each college to identify any barriers to physical disability inclusion.

My long-term goal is to become an advocate for inclusion of students with physical disability in higher education physical activity courses and recreation programs. It is my belief

that the best way to accomplish this goal is to help faculty to gain the skills and knowledge to be successful. This will first be done by continuing to research how Universal Design for Instruction (UDI) and adapted physical activity practices can be combined to help faculty provide the best possible experiences. Ultimately, I would like to use the knowledge and resources I gather to create a website for higher education physical education faculty to find information on inclusive practices. This website would provide the following:

- Links to ADA and other legal information
- Links to relevant organizations
- Links to useful journals and articles
- Information on relevant certifications
- UDI tutorials and resources
- Links to adapted/inclusive physical activity textbooks
- Video on adapted physical activity and sport
- Sample lesson plans for various courses

This website would also foster a closed-group learning community among faculty. This will be done by providing a member's forum where faculty can help each other by asking questions, discussing successful and unsuccessful teaching experiences, posting videos, and share new information.

REFERENCES

- American Association of Community Colleges (2019). Fast facts. Retrieved from:
https://www.aacc.nche.edu/wpcontent/uploads/2019/05/AACC2019FactSheet_re v.pdf
- Adams, T. M., Graves, M. M., & Adams, H. J. (2006). The effectiveness of a university level conceptually-based health-related fitness course on health-related knowledge. *Physical Educator*, 63(2), 104-112.
- Allar, I., Baek, J., & Taliaferro, A. (2014). Addressing inclusion in higher education physical activity programs. *Journal of Physical Education, Recreation, and Dance*, 85(9), 36-41. doi: 10.1080/07303084.2014.958254
- Barfield, J. P., Bennett, J., Folio, M. R., & C. Killman, C. (2007). Disability rights in higher education: Ensuring kinesiology program and accreditation standards do not discriminate. *Quest*, 59(4), 384-397. doi: 10.1080/00336297.2007.10483560
- Becker, S., & Palladino, J. (2016). Assessing faculty perspectives about teaching and working with students with disabilities. *Journal of Postsecondary Education and Disability*, 29(1), 65-82.
- Berry, G., & Mellard, D. (2002). Current status on accommodating students with disabilities in selected community and technical colleges (Fall 1999-Spring 2001). University of Kansas Center for Research on Learning, Lawrence, KS.
- Black, R. D., Weinberg, L. A., & Brodwin, M. G. (2014). Universal design for instruction and learning: A pilot study of faculty instructional methods and attitudes related to students with disabilities in higher education. *Exceptionality Education International*, 24(1), 48-64.
- Black, R. D., Weinberg, L. A., & Brodwin, M. G. (2015). Universal design for leaning and instruction: Perspectives of students with disabilities in higher education. *Exceptional Education International*, 25(2), 1-29.
- Braga, L., Tracy, J. F., & Taliaferro, A. R. (2015) Physical activity programs in higher education: Modifying net/wall games to include individuals with disabilities. *Journal of Physical of Physical Education, Recreation & Dance*, 86(1), 16-22. doi: 10.1080/07303084.2014.978417
- Brault, M. W. (2012). Americans with disabilities: 2010. *Current Population Reports*, 70-131. U.S. Census Bureau, Washington, DC.

- Burgstahler, S. (2017). Equal access: Universal design of instruction. Retrieved from:
https://www.washington.edu/doi/sites/default/files/atoms/files/EA_Instruction.pdf
- Carroll, D. D., Courtney-Long, E. A., Stevens, A. C., Sloan, M. L., Lullo, C., Visser, S. N.,...Dorn, J. M. (2014). Vital signs: Disability and physical activity - United States, 2009-2012. *Morbidity and Mortality Weekly Report*, 63(18), 407-413.
- Centers for Disease Control and Prevention (2019). Disability and health: Disability impacts all of us. Retrieved from:
<https://www.cdc.gov/ncbddd/disabilityandhealth/infographic-disability-impacts-all.html>
- Creswell, J. W. (2013). *Qualitative inquiry & research design*. Los Angeles: Sage.
- Creswell, J. W. (2014). *Research design*. Los Angeles: Sage.
- DePauw, K. P. (2000). Social-cultural context of disability: Implications for scientific inquiry and professional preparation. *Quest*, 52(4), 358-368. doi:
 10.1080/00336297.2000.10491723
- DePauw, K. P. (2014). Kinesiology faculty for the 21st century: STEPing into the future. *Quest*, 66(3), 295-301. doi: 10.1080/00336297.2014.918895
- Devine, M. A. (2016). Leisure-time physical activity: Experiences of college students with disabilities. *Adapted Physical Activity Quarterly*, 33, 176-194. doi:
 10.1123/APAQ.2014-0241
- Dysterheft, J. L., Lindahl-Lewis, P., Hubbard, E. A., Jones, O., Rice, L., & Rice, I. (2016). A mixed methods exploration of how university students with physical disabilities perceive physical activity and the influence of perceptions of physical activity levels. *Cogent Medicine*, 3, 1-18. doi:10.1080/2331205X.2016.1196809
- Dysterheft, J., Chaparro, G, Rice, L., & Rice, I. (2018). Investigating the outcomes and perceptions of an inclusive aquatic exercise class for university students with physical disabilities. *Journal of Postsecondary Education and Disability*, 31(1), 41-56.
- Fitzgerald, H., & Long, J. (2017). Integration or special provision? Positioning disabled people in sport and leisure. In J. Long, T. Fletcher, & B. Watson (Eds.), *Sport, Leisure and Social Justice* (pp. 126-138). New York, NY: Routledge.
- Gawronski, M., Kuk, L., & Lombardi, A. R. (2016) Inclusive instruction: Perceptions of community college faculty and students pertaining to Universal Design. *Journal of Postsecondary Education and Disability*, 29(4), 331-347. Retrieved from:
<https://files.eric.ed.gov/fulltext/EJ1133816.pdf>

- Jaarsma, E. A., Dijkstra, P. U., Geertzen, J. H. B., & Dekker, R. (2014). Barriers to and facilitators of sports participation for people with physical disabilities: A systematic review. *Scandinavian Journal of Medicine & Science in Sports*, 24, 871-881. doi:10.1111/sms.12218
- Kissow, A.-M. (2015). Participation in physical activity and the everyday life of people with physical disabilities: A review of the literature. *Scandinavian Journal of Disability Research*, 17(2), 144-166. <http://dx.doi.org/10.1080/15017419.2013.787369>
- Park, H. J., Roberts, K. D., & Stodden, R. (2012). Faculty perspectives on professional development to improve efficacy when teaching students with disabilities. *Journal of Postsecondary Education and Disability*, 25(4), 377-383.
- Qi, J., & Ha, A. S. (2012), Inclusion in Physical Education: A Review of Literature, *International Journal of Disability. Development and Education*, 59(3), 257-281. <http://dx.doi.org/10.1080/1034912X.2012.697737>
- Sato, T., & Haegele, J. A. (2017). Professional development in adapted physical education with graduate web-based professional learning. *Physical Education and Sport Pedagogy* 22(6), 618-631. doi: 10.1080/17408989.2017.1310832
- Sniatecki, J. L., Perry, H. B., & Snell, L. H. (2015). Faculty attitudes and knowledge regarding college students with disabilities. *Journal of Postsecondary Education and Disability*, 28(3), 259-275.
- Stapleton, D. T., Taliaferro, A. R., & Bulger, S. M. (2017). Teaching and old dog new tricks: Past, present, and future priorities for higher education physical activity programs. *Quest*, 69(3), 401-418. <http://dx.doi.org/10.1080/00336297.2016.1256825>
- Surratt (2019). *Physical activity instruction requirements in higher education* (Publication No. 13810703) [Doctoral dissertation, The University of North Carolina at Greensboro]. ProQuest Dissertations Publishing.
- The Center for Universal Design (n.d.). *The principles of universal design*. Retrieved from: https://projects.ncsu.edu/ncsu/design/cud/pubs_p/docs/poster.pdf
- Titus, S., Young, M. E. M., Nassen, K., & Ownhouse, S. A. (2016). A systematic review of recreation patterns and preferences of students with physical disabilities. *South African Journal for Research in Sport, Physical Education, and Recreation*, 38(3), 229-241.
- West, E. A., Novak, N., & Mueller, C. (2016). Inclusive instructional practices used and their perceived importance by instructors. *Journal of Postsecondary Education and Disability*, 29(4), 363-374. Retrieved from: <https://eric.ed.gov/?id=EJ1133764>

World Health Organization (2019). Disabilities. Retrieved from:
<http://www.who.int/topics/disabilities/en/>

Zhang, D., Landmark, L., Reber, R. Hsu, H., Kwok, O., & Benz, M. (2010). University faculty knowledge, beliefs, and practices in providing reasonable accommodations to students with disabilities. *Remedial and Special Education, 31*(4), 276-286.

APPENDIX A
FACULTY SURVEY

Faculty Perspectives about Teaching and Working with Students with Disabilities Survey

Becker, S., & Palladino, J. (2016). Assessing faculty perspectives about teaching and working with students with disabilities. *Journal of Postsecondary Education and Disability*, 29(1), 65-82.

* Modified for use with Community College Physical Education Faculty

1. What is your age? _____

2. What is your gender?
 - Male
 - Female
 - Other (please specify) _____
 - Prefer not to say

3. What is your ethnicity? (Check all that apply)
 - White (Not of Hispanic origin)
 - Hispanic/Latino
 - Black or African American (Not of Hispanic origin)
 - American Indian or Alaskan Native
 - Asian
 - Native Hawaiian or Pacific Islander
 - Prefer not to answer

4. How many years have you been teaching at the community college level? _____

5. How many years of professional experience (outside of community colleges) do you have in physical activity/health related fields? _____

6. What is your position at your college?
 - Full-time
 - Adjunct

7. What is your academic rank?
 - Instructor
 - Assistant Professor
 - Associate Professor
 - Professor

8. What Physical activity courses do you teach? (Check all that apply)

- Fitness and Wellness
- Weight Training
- Yoga
- Pilates
- Dance
- Martial Arts
- Swimming
- Zumba
- Other. Please specify: _____

9. Please list your undergraduate and graduate degree(s) and major(s). (Please provide the full name of your majors)

--

10. Please respond to the following statements using the scale below by checking a response based on your typical teaching style for a community college physical activity class.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I give special privileges to students who do the best work.	SA	A	N	D	SD
If I try really hard, I can get through to even the most difficult student.	SA	A	N	D	SD
I make a special effort to recognize students' individual progress, even if they are not getting high grades.	SA	A	N	D	SD
Factors beyond my control have a greater influence on my students' achievement than I do.	SA	A	N	D	SD
I am good at helping all the students in my classes make	SA	A	N	D	SD

significant improvement.					
I display the work of the highest achieving students as an example.	SA	A	N	D	SD
During class, I often provide several different activities so that students can choose among them.	SA	A	N	D	SD
I consider how much students have improved when I give them final grades.	SA	A	N	D	SD
I help students understand how their performance compares to others.	SA	A	N	D	SD
Some students are not going to make a lot of progress this semester, no matter what I do.	SA	A	N	D	SD
I encourage students to compete with each other.	SA	A	N	D	SD
I point out that those students who do well as a model for the other students.	SA	A	N	D	SD
I am certain that I am making a difference in the lives of my students.	SA	A	N	D	SD
There is little I can do to ensure that all my students make significant progress this semester.	SA	A	N	D	SD
I give a wide range of assignments, matched to students' needs and skill level.	SA	A	N	D	SD
I can deal with almost any learning	SA	A	N	D	SD

problem.					
----------	--	--	--	--	--

11. Have you ever taken a course or seminar, or pursued professional development opportunities about disability accommodations for students in higher education?

- Yes. Please specify where and describe the training:

- No

12. When reflecting on your teaching experience, describe the types of physical disabilities you have observed (not necessarily documented) in your physical activity classes.

--

13. Have you ever encouraged a student in any of your physical activity classes to seek services at your college's office responsible for students' disability accommodations?

- Yes
- No

14. Have you had a student in a physical activity class present you with documentation from your college's office responsible for students' disability accommodations, indicating his/her need for accommodations?

- Yes
- No [skip to question 17]

15. Think of one recent student who has requested accommodations (with documentation) in a physical activity class as you answer the following five questions.

a. What types of disabilities did your student have? (Check all that apply)

- Vision impairment/Blindness
- Hearing impairment/Deafness
- Autism
- Intellectual disability
- Specific learning disability
- Emotional-behavioral impairment (such as anxiety or depression)
- Physical impairment (such as being wheelchair bound)
- Orthopedic impairment
- Traumatic brain injury
- Other physical impairment
- Other health impairment (such as diabetes)

- Other: _____
- Do not know

b. Indicate the types of accommodations recommended in the letter from the college's office responsible for students' disability accommodations about this student. (Check all that apply)

- Extended time on tests
- Extended time for assignments
- Alternative forms of test (e.g. multiple choice instead of essay)
- Interpreter (such as a sign language interpreter)
- Note taker in class
- Oral exams/Reader for exams
- Quiet location for exams
- Excused absences for tardiness
- Lecture notes provided by you
- Other: _____

c. Did you have a conversation with the student about how you could accommodate her/his needs?

- Yes. Please check any of the following that apply in your case:
 - You recommended accommodations beyond what the letter from the college's office responsible for students' disability accommodations suggested.
 - You questioned the helpfulness or practicality of the accommodations in the letter.
 - The student asked how he/she could tailor accommodations to best meet your course expectations.
- No

d. Did you feel as though you had enough information and/or resources to accommodate the student's needs in your physical activity class?

- Yes
- No. Please Explain:

e. Did you contact the staff at your college's office responsible for students' disability accommodations to discuss the student's accommodation plan?

- Yes
- No

16. Please check the box below that best completes this sentence based on your experience:

It has generally been my experience that students with disabilities request...

- ...more accommodations than their accommodation letters specify.
- ...fewer accommodations than their accommodation letters specify.
- ...the same accommodations that their accommodation letters specify.

17. Have you ever adapted in-class physical activity for a student with a physical disability?

- Yes (Please explain in the box below)
- No

18. Please consider your physical activity classes and respond to the following statements.

Use the scale below by checking one response.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Students with physical or mental disabilities should be able to fully participate in all aspects of college life.	SA	A	N	D	SD
Faculty should make academic adjustments for students with disabilities.	SA	A	N	D	SD
Having interpreters in my class could be distracting for other students and/or myself.	SA	A	N	D	SD
Students with disabilities are reluctant to disclose their disabilities.	SA	A	N	D	SD

As an instructor, I think special course accommodations for students with disabilities are unfair to other students in the class.	SA	A	N	D	SD
I am concerned that other students in my class might think special course accommodations for students with disabilities are unfair.	SA	A	N	D	SD
Students with learning disabilities are able to perform as well as other students at the college.	SA	A	N	D	SD
Many students with disabilities expect special treatment.	SA	A	N	D	SD

19. Describe what you consider to be your most essential role in providing accommodations for students with physical disabilities in physical activity courses.

20. What barriers have you observed that impact your ability to meet the needs of students with physical disabilities in your physical activity classes?

21. What do you feel are the benefits of physical activity courses for students with physical disabilities?

22. How familiar are you with the term Universal Design for Learning or Instruction?

- Not Familiar
- Familiar
- Very Familiar

23. Describe how you prepare for and teach a physical activity course when you have a student(s) with a physical disability.

24. In what ways do you feel that your previous training and/or outside professional experience has influenced your ability to include students with physical disabilities in your classes?

25. If you were asked to complete additional training on ways to improve your physical activity courses for students with physical disabilities, what topics would you like to see included? What format (in-person vs. online) would best suit your needs?

APPENDIX B

SUMMARY OF SURVEY MODIFICATIONS

The *Faculty Perspectives about Teaching and Working with Students with Disabilities* (Becker & Palladino, 2016) is an eleven question survey. Eight of the questions were designed by the authors to assess faculty practices and experiences related to disabilities. For example, one item asks “Have you ever taken a course or seminar, or pursued professional development opportunities about disability accommodations for students in higher education?” (p. 80). The question is answered with a “Yes” or “No”, and directs the participant to explain a “Yes” answer with specifics on where this training occurred. Two of the questions are multi-question 5-point Likert-scale items derived from parts of previously validated instruments. The first set of Likert items is comprised of sixteen items selected from the *Patterns of Adaptive Learning Scale* (PALS) to measure three of its subscales: 1) teaching efficacy, 2) performance approach to teaching, and 3) mastery approach to teaching. While these questions were included in the present study, analysis of PALS subscales was excluded. Becker and Palladino (2016) noted that PALS is typically used in K-12 settings and little information is available for comparison of higher education faculty.

The second set of Likert items consists of eight questions derived from multiple source to assess faculty attitudes and awareness of ADA accommodations as they relate to disability in general. These questions were Likert-scale items where faculty could respond by choosing either strongly agree, agree, neutral, disagree, or strongly disagree. Two questions related to faculty assumptions about students with disabilities are taken from the *Accommodation of University Students with Disabilities Inventory*. Faculty attitudes are assessed with four items derived from a survey conducted by Houck et al. The last two questions were created by the principal author to gauge faculty general awareness of the ADA in a higher education setting.

The first major adjustment to the survey was the inclusion of additional demographic questions. The original survey only included questions about years of teaching experience and in which college the faculty taught. Based on a review of literature, several other faculty-specific factors may be at play for physical disability inclusion. The present study also asked for age, gender, ethnicity, years of outside professional experience, specific course taught, academic degrees and majors, position at the college, and academic rank.

The next major modification was the addition of 5 open-ended questions ask about faculty perceptions, experiences, and training specific to teaching students with physical disabilities. At the end of their online survey, Becker and Palladino (2016) used one open-ended question in an attempt to gather richer data for their study; “Describe what you consider to be your most essential role in providing accommodations for students with disabilities (p. 82)”. This open-response question was included as the researchers noted that their search of the literature yielded no studies in which faculty self-described their roles in complying with required accommodations. The question was changed to read “for students with physical disabilities”. It was noted that while useful, only one question does not provide substantial insight and is a limitation of their study. The authors also suggest that future studies should expand on their work to include more qualitative data. Based on a review of literature and identifying several aspects of physical disability inclusion in physical activity course setting, the following questions were added:

- 1) What barriers have you observed that impact your ability to meet the needs of students with physical disabilities in you physical activity classes?
- 2) What do you feel are the benefits of physical activity classes for students with physical disabilities?

- 3) In what ways do you feel that your previous training and/or outside professional experience has influenced your ability to include students with physical disabilities in your classes?
- 4) Describe how you prepare for and teach a physical activity course when you have a student(s) with a physical disability.
- 5) If you were asked to complete additional training on ways to improve your physical activity courses for students with physical disabilities, what topics would you like to see included? What format (in-person vs. online) would best suit your needs?

APPENDIX C
INTERVIEW QUESTIONS

The following questions were developed based on community college physical education faculty responses from initial survey research using a modified version of the *Faculty Perspectives about Teaching and Working with Students with Disabilities* survey (Becker & Palladino, 2016). After reviewing literature and analyzing faculty survey responses, the following 2 major questions emerged:

- 1) What physical barriers and other challenges have you observed for students with physical disabilities in physical activity courses?
 - Asked to probe for accessibility of on and off-campus fitness/sports facilities and available adapted equipment.
- 2) Describe your key supports and places you go for information on how to provide physical disability accommodations for physical activity?
 - Sub-questions: Where are you finding resources? Do accommodation letters provide enough information for physical activity course participation? What information or resources do you wish you had?

APPENDIX D
RESEARCHER PERSONAL BIOGRAPHY

The topic of inclusive physical activity is very important to me both personally and professionally. I have always been an advocate for physical activity for people of all ages and ability levels as a fitness professional and community college faculty member in physical education and health. This is particularly true for those with physical disabilities. With my experiences and beliefs, my positionality will show through in my research and recommendations.

As a young child, I suffered from a bone disease that led to many years of physical disability. In elementary school, I was the only student with a disability and placed in PE classes with everyone else. While I liked being with my classmates, the well-intentioned teachers did not know how to modify the activities so I could participate. Class time was often spent with me doing something completely different. This was not fun, and I certainly didn't feel included. Middle school was not much different. All students with disabilities were placed in separate adapted PE classes. Expectations in class were not high, and we learned little about how we could use physical activity to our benefit. I also saw first-hand how the "medical model" can lead to the stigma that those with physical disabilities were not capable of physical activity. After being cleared by my doctor to being regular physical activities, I remember when I was encouraged by the track coach to join the team to throw shot put. When I showed up to the first practice, the same coach changed his mind and told me that I should go home because "you shouldn't do this because of your disability." It is almost impossible to describe how bad I felt when that happened. While in high school, I was able to participate in regular PE classes and fortunate enough to play sports even though I had permanent mobility limitations. However, those past experiences did not give me the skills or confidence to really excel at any activity.

These experiences did make me ultimately realize I want dedicate a large portion of my career to helping people with physical disabilities to participate in physical activity. While I am not trained as a regular or adapted PE teacher, I focused much of my fourteen years as a personal trainer helping those with all ability levels. Through reading the latest information on physical activity, being mentored by very experienced and educated fitness professionals, applying my personal experiences, completing related continuing education, and completing coursework on special populations in my graduate kinesiology program, my professional practice quickly grew to specialize in people with varying needs and abilities. During that time I have spent countless hours training those with temporary and permanent mobility limitations that have included post-orthopedic rehabilitation, pre and post-joint replacement, wheelchair bound, Ataxia, and others. One of the main things I've learned from those clients is that they understand their limitations, but most are very excited to learn how to exercise and participate in physical activity to the best of their ability.

The desire to help those with physical disabilities has extended to my academic career. I have been a faculty member in physical education and health at the community college level since 2007. Over that time I have taught classes in fitness and wellness, golf, bowling, fitness walking, weight training, exercise and nutrition, personal and community health, kinesiology, and personal training. I've had students with a variety of disabilities in all of my courses, and pride myself on making sure they are included in my classes, teaching them about appropriate recommendations, and helping them learn the proper ways to perform physical activity for their benefit and enjoyment. It has been my experience that the stigma demonstrated by other students is reduced at this level. I remember a student I had about 5 years ago in a fitness and wellness class. She had suffered a traumatic brain injury from a car accident. She walked very slowly with a cane, and was very timid when the class began. After spending some initial one-on-one time

with her, I quickly got her performing weight training exercises with other classmates. They were all open and encouraging to helping and working with her. About 5 months after my class, I saw her on campus walking without the cane, and she thanked me for the things she learned in class. This is not the only example I have, but is certainly the one that made me truly proud of what I do.

However, my time teaching at this level has also taught me that these positive experiences are not always the case. For about 5 years I was the discipline chair at my college. During that time I had to help investigate a handful of student complaints related to faculty not being knowledgeable about physical disability inclusion. These were adjunct faculty that did not have the necessary training to feel comfortable working with students of varying ability levels and needs. In the end, we were able to help these faculty gain the needed knowledge, but it made me question if a lack of disability training was a widespread problem.

One of the key issues that I have observed is the lack of information given to faculty. When accommodation letters are given to faculty, they contain only information about the traditional accommodations the student is entitled to receive. They do not provide information on the student's specific limitations. The legality of these documents and their importance to student success in college are not questioned, but they do not provide the needed information to provide these students with appropriate experiences in physical activity courses. Several years ago, I was sitting in a seminar provided by disability services on accommodations and faculty responsibilities. When the letters were discussed, I asked the presenter what we can do in physical education courses to better help our students with physical disabilities. I was told "you can't ask about their disability directly, only encourage them to talk to you" and that "you should just give them alternate assignments." I firmly believe only faculty that are trained in working with disabilities are going to be comfortable enough to encourage students to speak about their

limitations. It is also my contention that giving alternate assignments is not in alignment with the ADA as they would represent a fundamental change to the purpose of our courses. If these lines of communication can be improved, our courses can provide substantial benefit to these students.

I have been in a position until recently to help the faculty at my campus better serve students with physical disabilities. This has been done through mentoring faculty during my role as department head. The purpose of this exploratory study was to gather information that could help all colleges provide the best possible physical activity course experiences for students with physical disabilities.

APPENDIX E

EXECUTIVE SUMMARY

There is growing research that supports the importance of physical activity experiences for college students with physical disabilities. Not only can these experiences positively contribute to the physical wellness of these students, they can contribute to their social wellness when physical activity is promoted alongside able-bodied peers (Devine, 2016; Dysterheft, Lindahl-Lewis, Hubbard, Jones, Rice, and Rice, 2016). Because higher education physical activity programs and courses are in a unique position to help all students meet the recommended levels of physical activity, it has been recommended that these programs prioritize inclusive teaching practices (Stapleton, Taliaferro, & Bulger, 2017). The needs of college students with physical disabilities in these programs can be met using inclusive practices that focus on opportunities to participate, appropriate environments, and properly designed instruction (Allar, Baek, & Taliaferro, 2014). Unfortunately, major barriers to successful disability inclusion may exist if instructors do not have adequate disability-related training (Braga, Tracy, & Taliaferro, 2015).

I, Richard Steele, recently conducted a research study among the physical education faculty within this community college system. The primary goal of this study was to explore faculty perspectives about teaching students with physical disabilities using a survey and interviews. Key results showed that the faculty surveyed possessed substantial teaching and professional experience, along with overall positive attitudes toward students with physical disabilities and required accommodations. However, over half of respondents did not have specific disability accommodation training and several described issues with accessibility, lack of adapted equipment for their classes, and limitations of accommodation documents. These findings suggest potential environmental and policy barriers to successful inclusion. To overcome these barriers, I have developed the following 5 recommendations based on my research findings:

- 1) **Encourage Student Enrollment and Communication:** Students should be made aware of the benefits of these courses and encouraged to communicate their specific needs to course instructors.
- 2) **Provide Accessible Facilities and Equipment:** Review all physical education facilities to make sure they are usable for all and ensure adapted physical activity equipment is available.
- 3) **Require All Faculty to Complete Basic ADA Training:** This will help all physical education faculty to become aware of ADA laws, disability definitions, and their responsibility to students.
- 4) **Provide Education in Inclusive Physical Education Practices:** Not all faculty are trained in, or have professional experience with, working with people with physical disabilities. Support faculty through professional development funds to improve skills.
- 5) **Provide Faculty Training in Universal Design of Instruction:** This inclusive teaching method maximizes learning for all students by focusing on accessibility and the learning environment in all aspects of course design and instruction. Instructors are challenged to go beyond basic legally required disability accommodations, which would greatly benefit students with physical disabilities in these courses.