EFFECTS OF ADAPTED PHYSICAL EDUCATION TEACHER PREPARATION EXPERIENCES ON INCLUSION SELF-EFFICACY: A QUANTITATIVE AND QUALITATIVE STUDY

A Manuscript Style Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Science in Exercise and Sport Science-Physical Education Teaching (Adapted Physical Education)

Rachel L. Smith

College of Science and Health Physical Education Teaching: Adapted Physical Education

December, 2013
EFFECTS OF ADAPTED PHYSICAL EDUCATION TEACHER PREPARATION EXPERIENCES ON INCLUSION SELF-EFFICACY: A QUANTITATIVE AND QUALITATIVE STUDY

By: Rachel L. Smith

We recommend acceptance of this thesis in partial fulfillment of the candidate's requirements for the Master of Science Degree in Exercise and Sport Science-Physical Education Teaching (Adapted Physical Education).

The candidate has completed the oral defense of the thesis.

Manny Felix, Ph.D.
Thesis Committee Chairperson

Kristi Mally, Ph.D.
Thesis Committee Member

Garth Tymeson, Ph.D.
Thesis Committee Member

Thesis accepted

Steve Simpson, Ph.D.
Graduate Studies Director
ABSTRACT

Smith, R. Effects of adapted physical education teacher preparation experiences on inclusion self-efficacy: A quantitative and qualitative study. MS in Exercise and Sport Science-Physical Education Teaching, Adapted Physical Education, December 2013, 63 pp. (M. Felix)

During teacher preparation, preservice teacher candidates undergo a variety of professional development opportunities that allow them to gain knowledge and experience that will be useful in the teaching field. Many physical education (PE) teacher preparation programs provide an introduction to adapted physical education (APE) survey course to prepare general PE teachers to instruct students with disabilities in the PK-12 setting. This study examined the effects of an introduction to APE course with an accompanying clinical experience on the self-efficacy towards inclusion of students with disabilities. Self-efficacy data were gathered from a group of students (N = 49) enrolled in an introductory APE course during the 2011-2012 academic year using the Situational-Specific Self-Efficacy and Inclusion of Students with Disabilities in Physical Education survey (Block, et al 2010). Further, a subgroup of these participants (n = 16) underwent a one-on-one interview to further examine aspects of the clinical experience that most influenced their self-efficacy. Survey results showed that the introductory course with clinical experience significantly improved self-efficacy among preservice teachers (p < .05). In addition, interviews revealed the combination of a lecture based course and the hands-on clinical experience were identified as the top two reasons why self-efficacy increased.
ACKNOWLEDGEMENTS

First, I would like to thank Dr. Manny Felix for his assistance with my thesis project. Dr. Felix provided encouragement and reassurance throughout the development and completion of this thesis. Also, I would also like to thank Dr. Garth Tymeson and Dr. Kristi Mally for serving on my thesis committee and offering insight and support to make this possible. Additionally, I would like to thank Dr. Garth Tymeson and Dr. Manny Felix for giving me the opportunity to develop and grow as a future educator in adapted physical education through the graduate studies program at UWL.

Thank you to the undergraduate students at UWL who graciously agreed to participate in this study and took time out of their schedules to meet with me one-on-one. Your support and participation has made this a very knowledgeable experience.

To my friends in La Crosse, I am so grateful that we all took the chance to move to Wisconsin for the same passions, and I am thankful that I was able to share this experience with all of you. I have no doubt that you will all have amazing accomplishments in your professional future. Also, your feigned appreciation for my ridiculous internet pictures and videos has inspired me to continue to inundate you with them long after we part. A very special thank you to Nicholas Williams. I am so glad you knocked me in the mud the first night we met and still had the courage to ask me on a date.

Lastly, I would like to thank my Mom, Dad, and brother, Taylor, for the support and inspiration you have given me throughout my extensive academic career. Mostly, thank you for insisting that I go on as many adventures as I can.
# Table of Contents

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT .......................................................... iii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS ................................................ iv</td>
</tr>
<tr>
<td>TABLE OF CONTENTS ................................................... v</td>
</tr>
<tr>
<td>LIST OF APPENDICES ................................................... vii</td>
</tr>
<tr>
<td>INTRODUCTION ........................................................... 1</td>
</tr>
<tr>
<td>METHODS ................................................................. 6</td>
</tr>
<tr>
<td>Participants .......................................................... 6</td>
</tr>
<tr>
<td>Instruments ........................................................... 7</td>
</tr>
<tr>
<td>Interviews ............................................................ 7</td>
</tr>
<tr>
<td>Procedures ............................................................. 8</td>
</tr>
<tr>
<td>Statistical Analysis .................................................. 9</td>
</tr>
<tr>
<td>RESULTS ................................................................. 11</td>
</tr>
<tr>
<td>Table 1. Mean (± SD) Self-Efficacy Scores by Semester .......... 11</td>
</tr>
<tr>
<td>DISCUSSION ............................................................. 13</td>
</tr>
<tr>
<td>Content Knowledge ................................................... 13</td>
</tr>
<tr>
<td>Clinical/Hands-on Experience ....................................... 14</td>
</tr>
<tr>
<td>Minimizing Intimidation .............................................. 15</td>
</tr>
<tr>
<td>Teaching Lessons ..................................................... 16</td>
</tr>
<tr>
<td>Improving the Clinical Experience ................................ 16</td>
</tr>
<tr>
<td>Observe in the School Setting ...................................... 17</td>
</tr>
<tr>
<td>Leadership/Mentorship ............................................... 18</td>
</tr>
</tbody>
</table>
### LIST OF APPENDICES

<table>
<thead>
<tr>
<th>APPENDIX</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Review of Related Literature</td>
<td>26</td>
</tr>
<tr>
<td>B. Situational-Specific Self-Efficacy and Inclusion of Students With Disabilities in Physical Education Survey</td>
<td>40</td>
</tr>
<tr>
<td>C. Qualitative Interview Questions</td>
<td>53</td>
</tr>
<tr>
<td>D. Email to Recruit Participants in Interview</td>
<td>56</td>
</tr>
<tr>
<td>E. Institutional Review Board Documentation</td>
<td>58</td>
</tr>
</tbody>
</table>
INTRODUCTION

As teacher education programs work to prepare the next generation of teachers, much speculation exists on how to adequately prepare future teachers to use effective instructional strategies when diverse learners are present in their classrooms. While preservice teachers may conceptually understand that all students learn differently, they may not have the practical competence to use appropriate teaching practices for working with students with disabilities who have unique learning styles. Supported by current federal legislation and educational reform, more and more students with disabilities are included in general education programs, including physical education (Piletic & Davis, 2010). For teachers who are not prepared to work with students with disabilities, many may experience feelings of anxiety, uneasiness, nervousness, or apprehension towards teaching these students (Berry, 2010). Physical education teacher preparation programs are among the many educational fields in higher education that are striving to assist teacher candidates to achieve teaching competency in settings where there are diverse learners.

As stated in the Individuals with Disabilities Education Act (IDEA, 2004), children with disabilities are guaranteed a free appropriate public education in the least restrictive environment (LRE). This federal law strongly emphasizes that students with disabilities should be educated to the maximum extent possible in the general education curriculum alongside their nondisabled peers. When preparing the student’s
individualized education program (IEP), placement in the general education classroom is the first placement option the IEP team must consider. For physical education teachers, this means that students with disabilities will likely be placed in their general physical education classes since many are able to learn successfully in this learning environment.

Preservice teachers in all educational fields experience some degree of anxiety or nervousness when working with students with disabilities. Prior to having coursework specifically related to working with students with disabilities, including adapted physical education teacher candidates, preservice teachers will likely report feelings of anxiety.

In one study, six senior physical education preservice teachers were enrolled in an introductory survey course in adapted physical education and were required to teach 3-4 students with similar disabilities for a 45-minute lesson in a public school (Everhart, 2009). In this study, Everhart measured heart rates and identified perceptions of the six preservice physical education teachers as they were instructing a small group of students with disabilities and when instructing a small group of nondisabled students. In addition to monitoring the changes in heart rate between teaching each group of learners, the preservice teachers completed an anxiety questionnaire and participated in an interview before and after each lesson. Heart rate data indicated that the preservice teachers appeared more “excited” before teaching the students with disabilities than before teaching students without disabilities. Questionnaire and interview data showed that although teacher candidates shared a common belief that students with disabilities should be included in the general physical education learning environment, they exhibited a high degree of “worriedness” and “concern” for teaching students with disabilities. They also expressed a lack of understanding of the backgrounds of these students and how they
learn which likely contributed to high anxiety levels (2009). Learning to adapt instruction and planning to meet the needs of students with disabilities in their classes was expressed as very important to the preservice teachers. They also recognized the need for differentiating instruction to reach the learning styles of all students in the class. Overall, the preservice teachers who participated in this study expressed feelings of apprehension toward teaching students with disabilities, but also “looked forward to gaining experience with the students.” The future teachers felt that as they gain experience working with students with disabilities, some of the anxiety would dissipate.

By providing preservice physical education teachers with a clinical experience where teaching students with disabilities is emphasized, teacher preparation programs can offer teacher candidates opportunities to gain confidence when teaching in an inclusive general physical education setting (Everhart, 2009). Not only will teacher candidates enhance their confidence, but they will also develop a more positive attitude towards students with disabilities in their classrooms (Combs, Elliot, & Whipple, 2010). It is suggested that with higher confidence and more positive attitudes, teachers are better able to design lesson plans and implement teaching strategies that will accommodate the needs of students with disabilities (2010).

By investigating the factors that increase self-efficacy of preservice teachers during a clinical experience, this research will be able to provide physical education teacher education preparation programs with information regarding effective practices for preparing teacher candidates to teach students with disabilities. The outcomes of this current study provide data regarding the self-efficacy towards teaching students with a variety of disabilities in an inclusive setting. Self-efficacy is defined as your personal
judgment of your competence or your confidence in your ability to carry out a goal or task (Block, Klavina, & Hutzler, 2010). These researchers also reported that self-efficacy, self-esteem, and confidence are often used interchangeably. However, these terms have important differences. Self-efficacy refers to judgment regarding some type of goal while self-esteem refers to judgment of the individual’s self-worth. Self-esteem, according to the researchers, is measured at a more general level and is not considered in terms of specific tasks or goals. For teachers, the researchers suggest that the most powerful source of self-efficacy is mastery experience. Mastery experience is defined as a person’s previous authentic experiences performing a specific task and their personal interpretation of that experience. Having a successful mastery experience will improve self-efficacy while having an unsuccessful mastery experience will weaken it.

One purpose of this study was to measure the effects of an introductory adapted physical education course with an accompanying clinical component on the self-efficacy of beginning physical education teacher candidates. Another purpose of the study was to determine the specific parameters of an effective clinical experience for a 3-credit introductory adapted physical education course that increases the self-efficacy of physical education teacher candidates for teaching students with disabilities. The specific parameters of a clinical experience that increase self-efficacy have yet to be determined. Many specific factors that make up a clinical experience may influence self-efficacy levels. For example, it may be that either a hands-on or observational approach or a combination of the two that may best enhance self-efficacy. Factors that may influence the clinical experience include levels of mentorship/supervision, exposure to disability types, and/or exposure to modified equipment and instructional strategies. An expected
finding in this study is that preservice physical education teachers who have experience in teaching students with disabilities during their teacher preparation program will report higher feelings of self-efficacy regarding inclusive instruction practices. In addition, numerous factors of a clinical experience can influence feelings of self-efficacy for teacher candidates.
METHODS

Participants

Prior to data collection and subject participation, approval was received from the University of Wisconsin-La Crosse Institutional Review Board for the Protection of Human Subjects. A total of 49 students enrolled in an introduction to adapted physical education course with an accompanying clinical component completed a pre- and post survey on inclusion self-efficacy in the general physical education setting. This group included students from the Fall 2011 (n = 26) and Spring 2012 (n = 23) semesters. Participants in the survey portion of the study included both undergraduate students (n = 47) and graduate students (n = 2) admitted or in the process of being admitted into the University of Wisconsin-La Crosse Physical Education Teacher Education Program.

The individuals who participated in the interview portion of the study represented a subsample from the two semester cohorts of preservice physical education majors who completed the introductory APE course. A total of 16 participants were utilized for the interview portion of the study. The students who indicated initial interest to participate in the interviews were placed in a random computer generated numbering system in order to select 8 participants from each cohort. In order to obtain participants in the one-on-one interview, an email was distributed to all eligible students enrolled in ESS 231 in Fall 2011 and Spring 2012. In this email, the aims of the interview and directions of how they could request participation in the study were explained. A second request for subject
participation was emailed approximately 5 days later. The students who were interested in participating in the study expressed desire to be involved in a one-on-one interview by responding to the email or by contacting the researcher by phone. A copy of this email can be found in Appendix D

**Instruments**

The survey used in this study was the Situational-Specific Self-Efficacy and Inclusion of Students with Disabilities in Physical Education, Version 3.3, (Block, et al 2010). This is an established and reliable survey to measure the self-efficacy of physical education teachers to include students with disabilities in physical education. The survey posed scenarios involving high school age students with three different disabilities: intellectual, physical, and visual disabilities. In each situational scenario, a brief description of the present levels of performance and current limitations of the student are described. Following each scenario are questions regarding the level of confidence in their ability to carry out physical education teaching tasks such as adapting equipment, adapting for safety, instructing peers, and writing goals. The item response scale ranged from 1 (no confidence) to 5 (complete confidence). The survey also included a page for demographic questions for the participants to provide information regarding their age, level in school, prior experience in a teaching setting, and experience working with individuals with disabilities. A copy of this survey can be found in Appendix B.

**Interviews**

The second data collection aspect of this study included a one-on-one interview regarding preservice teaching students’ self-efficacy towards students with disabilities in the general physical education classroom and factors that have influenced their feelings
of self-efficacy. The interview questions were developed to address the four main factors thought to influence self-efficacy and preparation of preservice physical education teachers: course lecture, adapted physical education clinical (through the UW-La Crosse Motor Development Program for Children with Disabilities), mentorship/leadership, and possible ways to improve the clinical experience. The questions are included in Appendix C.

In addition to the audio recording, the researcher used an individual recording sheet throughout the interview to take notes and recognize trends that were identified by the participants (Strauss and Corbin, 1990). On the recording sheet, notes of specific times at which the discussion of a topic were made for easy referencing during data analysis. The participants were allowed to review the recording sheet prior to the interview to ensure that there was nothing out of the ordinary being recorded by the researcher.

**Procedures**

The survey was administered to all participants twice. The first administration of the survey occurred prior to the beginning of the clinical portion of introductory APE course. The second administration occurred after the final clinical session at the end of the semester. The clinical portion of the introductory course lasted 12 weeks and included ~25 hours of hands-on experience working with children with disabilities.

The introductory APE course introduced preservice teachers to instructing students with disabilities in a physical education setting through the Motor Development Program clinical experience. The children in the Motor Development Program ranged in age from 3 to 21 years, in grades Pre-Kindergarten to 12th grade. During the lecture
portion of the introductory APE course, students learned a variety of disabilities’ characteristics and causes, implications for physical education instruction, information regarding modified or adapted equipment, and techniques for instructing persons with disabilities. Also covered in the lecture portion of the class were topics such as laws in special education and individualized education programs (IEPs).

Regarding the qualitative portion of this study, the researcher utilized interview strategies to ensure comfort and normalcy of conversation with the participants during the interviews (Strauss & Corbin, 1990). The researcher paused after each question to allow for a response, used appropriate probing questions as needed, and maintained natural eye contact throughout the interview.

For confidentiality of the individuals who participated in the research study, a unique code was assigned to each participant to be used throughout the research process. All audio recordings using GarageBand '11 for MacBook Air and transcribed documents of interviews with the participants were kept in a locked office to which only the primary researcher and research committee had access. The participants were informed again of the aims of the study and the topics of conversation that would be brought up during the interview were previewed. The participants gave their written consent to participate in the study and the interviews occurred in a private office setting.

Statistical Analysis

The data gathered from this study were analyzed using Microsoft Excel 2010 and the Statistical Package for Social Sciences (SPSS 18.0, Inc., Chicago, IL). For the Situational Specific Self-Efficacy and Inclusion of Students with Disabilities in Physical
Education survey, average subscores (± standard deviation) were completed on each of the three types of disabilities (intellectual, physical, and visual disabilities).

A multivariate analysis of variance (MANOVA) was performed to compare scores on the survey's three disability categories between pre- and post conditions as well as between the groups of participants where the MANOVA showed significant results. An alpha level of $p < 0.05$ was used to determine differences.

General notes were recorded during interviews to make inferences that were later detailed during the qualitative portion of the study. All of the interview recordings were reviewed and transcribed by the researcher. Four category headings were developed initially, and additional category headings were identified under which all of these qualitative data were accounted for. The recordings and recording notes were transcribed where appropriate, and organized into themes.
RESULTS

The Situational-Specific Self-Efficacy and Inclusion of Students with Disabilities in Physical Education survey assessed feelings of self-efficacy of participants when teaching students with disabilities (intellectual, physical, visual) in the inclusive setting. The survey is divided into three sections for each of the represented disabilities categories; a sum score is provided for each of the three categories with a total possible sum of 60 for the combined three categories. These data, as well as the average group data, are reported in Table 1.

Table 1. Mean (± SD) Self-Efficacy Scores by Semester

<table>
<thead>
<tr>
<th>Category</th>
<th>Fall 2011 ESS 231 Preservice Teachers (n = 26)</th>
<th>Spring 2012 ESS 231 Preservice Teachers (n = 23)</th>
<th>Combined ESS 231 Preservice Teachers (N = 49)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual Pre</td>
<td>31 ± 7.70</td>
<td>35 ± 6.64</td>
<td>33 ± 7.13</td>
</tr>
<tr>
<td>Intellectual Post</td>
<td>45 ± 5.10^</td>
<td>44 ± 4.43^</td>
<td>45 ± 4.77*</td>
</tr>
<tr>
<td>Physical Pre</td>
<td>35 ± 7.77</td>
<td>41 ± 8.50</td>
<td>38 ± 9.29</td>
</tr>
<tr>
<td>Physical Post</td>
<td>52 ± 5.52^</td>
<td>52 ± 5.51^</td>
<td>52 ± 5.46*</td>
</tr>
<tr>
<td>Visual Pre</td>
<td>27 ± 7.10</td>
<td>29 ± 7.79</td>
<td>28 ± 7.82</td>
</tr>
<tr>
<td>Visual Post</td>
<td>43 ± 4.38^</td>
<td>42 ± 5.22^</td>
<td>42 ± 4.77*</td>
</tr>
</tbody>
</table>
* p < .001 between pre and post test scores for combined group

^ p < .001 between pre and post test scores for both semester groups

Pretest scores from the intellectual disability section shows a mean of $33 \pm 7.13$ and a post test score of $45 \pm 4.77$ (p < .001) for the combined group. For the physical disability section, a pre-test score of $38 \pm 9.29$ and post test score of $52 \pm 5.46$ (p < .001). A mean pretest score of $28 \pm 7.82$ is shown for the visual impairment section of the test, followed by a post test score of $42 \pm 4.77$ (p < .001). Multivariate analysis of variance (MANOVA) also showed significant (p < .001) difference between pre- and post test scores for each disability group for both semester groups.

Overall, results from the one-on-one interviews identified many factors of the introduction to adapted physical education course that were perceived to have the greatest impact on feelings of inclusion self-efficacy. The most frequently cited factors influencing self-efficacy of inclusive teaching and students with disabilities included; (1) working one-on-one with a student with a disability, (2) learning about a variety of disabilities during the lecture portion of the course, (3) teaching students with disabilities in the physical activity setting, (4) receiving feedback from experienced leaders and instructors in the area of adapted physical education, and (5) working with multiple age groups of students with disabilities.
DISCUSSION

The results from this study show the strong influence of a quality, comprehensive experience on preservice teacher candidates' self-efficacy towards teaching students with disabilities in an inclusive setting. The preservice teachers enrolled in an introductory adapted physical education course with an accompanying clinical experienced significant positive changes (p < .001) in feelings of self-efficacy for teaching students with intellectual, physical, and visual disabilities.

Content Knowledge

A useful aspect of this research was supplementing quantitative data that demonstrates improvement of teaching self-efficacy as a result of participating in a survey APE lecture course combined with a hands-on teaching experience with the qualitative information gathered during the one-on-one interviews. All 16 participants in the interview portion of the study emphasized the value of learning about a variety of disabilities during the ESS 231 course lecture from the primary instructor. In the course, the students studied a variety of behavioral/social, physical, emotional/behavior, and sensory disorders, including their movement implications and appropriate physical activity content. The interview participants frequently attested that it was helpful to learn about the disabilities during class, and then see an example of that disability during the associated clinical experience. Referring to identifying persons with disabilities during the clinical, one participant reported, "You can pick it out while it's still fresh in your
mind.” Another applied the knowledge acquired during class to teaching physical education,

"The more you can understand where a person is coming from, what their habits are, what they do, and learn more about the person in general, you learn how to work with them and modify the activity so that suits their needs and allow them to be successful."

Despite having received a great deal of information about disabilities, there is still much content left to be discussed regarding disabilities. One participant felt, “There’s so much more that I need to learn in regards to individual disabilities.” Additional professional development opportunities may be necessary, or even additional coursework focusing on a variety of disabilities may provide the necessary content knowledge for preservice teachers. Opportunities to gain additional knowledge beyond an introductory APE course with a clinical experience may be found in advanced APE studies. Advanced APE studies may be provided through undergraduate APE teaching minors and concentrations or through graduate APE programs.

Clinical/Hands-on Experience

The most useful, rich information arose when the participants spoke regarding the experience of working one-on-one with a student with a disability. When asked “How and why has your ability to teach students with disabilities changed as a result of this experience?” all participants reported that the hands-on experience of teaching actual students with disabilities had the greatest effect on their self-efficacy. One participant said, “I always think that the hands-on experience working directly with the kids is the most valuable experience you can get.” Another participant reported, “The hands-on
application does wonders, because until you actually try to implement what you’re learning, you won’t know how it works for you.” Responding to the same question, one participant said: “Getting to work with [the students with disabilities] one-on-one, I think it’s one of the most valuable parts of it, because you can learn things in the classroom. I think it’s not really quite understood until you actually do it.” In regards to the entire experience of classroom lecture and clinical experience, one participant stated, “MDP was the best part about it, because you get the hands-on experience. I think without the hands-on experience, I would find the class less useful.”

Minimizing Intimidation

Though never directly asked in the one-on-one interviews, some participants reported feelings of nervousness and apprehension. One participant said, “It was intimidating at first. I was scared... I didn’t want to do anything wrong or say anything wrong.” Another said, “I am definitely way more comfortable with it [now]. I was really nervous the first two weeks.” Another participant felt less prepared towards the beginning of the experience. She felt as though the preservice teachers were “thrown into things.” Another participant felt more apprehension toward interacting and instructing his or her one-on-one student: “Before I was more nervous, I didn’t really want to screw anything up. I didn’t want to upset the kids. I didn’t want to do anything wrong. Towards the end, you just realize you have to be strict with them. You have to be assertive.”

While it is impossible to give the preservice teachers information on exactly what they will encounter during a clinical experience, much consideration should be paid to giving them as many tools as possible to ease anxiety. Teaching strategies for
communication and instruction with students with disabilities can be presented in the
course for the preservice teachers to implement during clinical experiences.

**Teaching Lessons**

When asked to comment on specific experiences in the clinical portion of the
class that helped the participants become a better teacher of students with disabilities,
many participants felt having the opportunity to teach lessons in physical education
greatly affected their feelings of self-efficacy. Comments from the participants included:

"I think more experience, I think that was invaluable, because you can sit there and
preach and preach what this is and what that is. It doesn't really mean anything if you
don't have some hands-on time with any kids."

Another participant referred to her teaching as, "It might be trial and error, but
getting out there and making mistakes in my lessons will make me a better teacher in the
future." That participant also stated, "Before in my experience with disabilities it was
very limited, it was just be nice and have a good personality. Now, I can actually plan a
lesson, execute that lesson, have them get the most they can get out of my lessons."
Another participant said, "Being able to teach was really good. Just seeing what I came
up with, if it would work or not work."

**Improving the Clinical Experience**

A suggestion provided by one participant recommended videotaping the lessons
taught by the preservice teachers: "One thing that may have helped would have been if
we recorded me when I was doing it and we had a CD per student and recorded them
when they were teaching. Because you only teach two or three times, and so I could go
home and be like, 'This is where I lost these students; this is where I messed up.' [You
get] immediate feedback from your mentors, but they can only remember so much and you can only remember so much.” While no other participants mentioned the idea of videotaping during the clinical experience, it is undoubtedly a technique utilized in many different teacher preparation settings. In an article about the use of video technology in preparing teachers, it is suggested that video recording a student-teacher can aide in the reflective process of analyzing pedagogy practices and act as another set of eyes for the teacher (Hamilton, 2012).

**Observe in School Setting**

Another suggestion offered by the participants proposed the option of visiting a local public school and observing an actual physical education class that utilizes inclusion practices for their students with disabilities. The first participant suggested, “*With the MDP you don’t get the opportunity to see what it’s like to have one adapted kid in a regular [physical education] class.*” This evolved to, “*That would be cool to have the opportunity to go see an adapted experience in the schools.*” In order for university teacher preparation programs to provide opportunity for such a scenario to take place, cooperation between local school officials and teachers would need to occur when planning for observers to enter the classroom. Although not impossible, in relatively large physical education teacher education programs, it might be difficult to provide every candidate an opportunity to experience a hands-on clinical experience in the public schools since there are relatively fewer APE teachers than general PE teachers. It may be more logistically feasible to reserve public school APE clinical experiences for those students who further pursue advanced study in APE.
It is evident that the preservice teachers value the opportunity to instruct students with disabilities in a physical activity setting. It is beneficial to the preservice teachers' feelings of self-efficacy when they are able to practice teaching a lesson in a controlled setting. However, not all university teacher-preparation programs have the opportunity to provide their teacher candidates with such a clinical experience that involves teaching students with disabilities. In this case, it is important to examine the use of peer teaching, or college students instructing other college students in a methods-course setting, to make them meaningful to the preservice teachers.

**Leadership/Mentorship**

Having an opportunity to work alongside individuals with more APE teaching experience also proved to be beneficial to the self-efficacy of the preservice teachers. One participant appreciated watching other students with more experience in teaching APE as well as graduate students in APE. She said, "You're always kind of taking mental notes, 'oh yeah, I see how they're doing that now.' Seeing people with more experience, the way they handle everything, you just kind of pick up on it." Another participant liked having the ability to consult with the more experienced students during the clinical experience: "I also really liked having someone experienced like the graduates and the other APE students that you could ask questions."

The roles of staff leaders in the clinical setting can be utilized in many different ways throughout a clinical experience. Having the leaders available to assist in the development and delivery of lesson plans was shown to be helpful to the preservice teachers. When asked, "In what ways did the supervision/leadership provided to you by the MDP staff help you to enhance your knowledge and skills as a future teacher for
students with disabilities?,” One participant responded, “Excellent feedback on all my reflections. He actually wrote, ‘Hey maybe next time try this, good idea here.’ That makes you feel important to know that someone is actually reading your work and caring about it.” One participant appreciated the more collaborative feeling of working with a student in a leadership position and receiving feedback from someone who is more of a colleague. She said, “Hearing it from a teacher/student point of view, made more sense, rather than just from a teacher.”

Learning instructional strategies and teaching techniques from knowledgeable staff members demonstrated during the clinical experience was viewed as beneficial to the future teachers. The participants had an opportunity to watch experienced APE students teach, and gather approaches to instruction. When asked which strategies implemented by the leadership in MDP were useful in providing an appropriate model for instructing students with disabilities, one participant said, “I picked up management skills, communication skills and confidence and being comfortable with the kids.”

Another participant appreciated the help when interacting with their one-on-one student, “They were able to help with the communication barrier.” Another participant answered similarly, “Communication is a big one. Especially being with someone who is nonverbal, figuring out how to relay anything to them.”

One participant, who felt very strongly about the role of the leadership and experienced APE students, shared his feelings that the leadership can have a pivotal role in the overall experience of the clinical. “If you have people with bad attitudes or people that don’t care, the program is going to just be horrible, it’s going to suffer. But if you have people that genuinely care, they are good at what they do, they know the answers...
the biggest thing is having the proper people in place to run things so if you have the right people there it's going to be a good time and you're going to learn a lot."

**Varied Age Groups/Experiences**

The final most discussed theme of the clinical experience was the ability to work with multiple age groups of students with disabilities. Because of the design of this university’s clinical experience, the preservice teachers have an opportunity to work one-on-one with students with disabilities in two of the three age groups (elementary, middle, and high school young adult age). One participant who taught in the middle and young adult groups, offered the following comment: “I wish I could have seen all three groups. I still wanted to dabble my feet in every group, like the little kids in group A. I don’t know what it’s like.” Other participants simply expressed their desire to see what it is like to teach physical education content in all three age groups, as the type of content taught to very young students is very different from the type of content taught to young adults.

Ultimately, the participants underwent much growth and change as a preservice teacher because of the required clinical experience. While the research can only account for the significant change in self-efficacy as a result of this course, many participants felt changes in attitudes toward students with disabilities as well. One participant shared feelings about learning more about the children in the MDP, “I gained more respect for people with disabilities, it’s really eye opening when you start to hear about everything.” Another participant said, “I underestimated their abilities.” Perhaps the most impactful revelations come because of combining the respect for persons with disabilities with the recognition of their abilities. One participant realized, “They’re just like any other kid really...you can joke around with them, you can be playful with them.” Another
participant offered his feelings about teaching students with disabilities in a general physical education setting if this was the only professional development in APE he would have, "Before I didn't really have a clue, because I had really limited experiences of working with students with disabilities. There's a lot to learn, I still have a lot to work on. But, I feel that if I walked into a classroom right now with an array of students with disabilities, I would be able to find a way to make it work, it may not be pretty but I would be able to deal with it, where before I may be like 'I don't know what to do.'"

**Limitations**

Limitations of this research included the survey taken by the preservice teachers enrolled in the introductory APE course. The preservice teachers took a pre- and post survey regarding their self-efficacy towards teaching students with only 3 different types of disabilities in an inclusive setting: intellectual, physical, and visual. Many of the children in the clinical experience were on the autism spectrum, therefore the survey would have presented strong data had it included scenarios for behavioral disorders and autism in addition to the three original inclusion scenarios. The hands-on clinical portion of the introduction to adapted physical education course has children with a variety of disabilities, but there were no children with visual impairments. However, the instructor of the course provided many simulations of students with visual impairments and instructional techniques to use with these students in physical education during the lecture portion of the class.

Other limitations, as identified through the one-on-one interviews, included exposure to only two different age groups of students with disabilities. For the clinical portion of the class, teacher candidates were placed randomly into three groups: young
students (ages 3-7), middle age student (age 8-13), and high school/young adult students (ages 13-20). At a halfway point in the semester, the teacher candidates were then assigned to a different group. This change from one group to another occurred only once, resulting in exposure to only two of the three age groups. In addition to the lack of exposure to all age ranges of students, the participants in the study have varying prior experiences with individuals with disabilities. Some participants had no previous experience with individuals with disabilities, while others had experience working with individuals with disabilities in volunteer, employment, and/or family situations.

Future research should continue to determine specific factors and parameters that make a preservice teacher clinical experience more meaningful and likely to increase self-efficacy when teaching students with disabilities. Future research could also address the optimum frequency of clinical experiences that has a maximum effect on the self-efficacy of preservice teachers towards teaching students with disabilities. Another question of interest might address the clinical experience that takes place in an inclusive setting that includes both students with and without disabilities. Will participation in this type of clinical experience result in higher feelings of self-efficacy towards inclusion? What are the effects of taking an introductory adapted physical education course with no hands-on clinical experience on the feelings of inclusion self-efficacy? Would more opportunities to teach students with disabilities in a clinical experience influence the feelings of self-efficacy among preservice teachers? Would a preservice teacher clinical experience that includes both hands-on instructional opportunities and observations in the public school setting be as effective as only hands-on instructional clinical? The answers to these questions remain to be speculative and should be addressed in future research.
that addresses effective practices in APE teacher preparation. This research will assist APE teacher preparation programs make important decisions on how an introductory course should be designed.
CONCLUSION

The data gathered from this study show that preservice teachers in this introduction to adapted physical education course improved their self-efficacy in teaching students with disabilities in their general physical education classes. This study also identified parameters of the introductory adapted physical education course that were perceived to increase self-efficacy such as the content of the lecture, the involvement in a clinical experience, and the role of mentorship or leadership throughout the experience. While this study did not examine the influences of the solely the lecture course nor the individual influences of solely the clinical experience, the comprehensive evaluation of the course suggested that lecture experience coincides best with an accompanying hands-on experience. It is recommended that future research continue to focus on the professional development of preservice teachers working with students with disabilities in the general classroom setting. As more and more general physical education teachers are instructing students with disabilities in their classes, specific methods of effectively preparing these teachers should be implemented in these teacher preparation programs.
REFERENCES


Individuals with Disabilities Education Improvement Act (IDEA) of 2004, 20 U.S.C. 1400, et seq.


APPENDIX A

REVIEW OF RELATED LITERATURE
REVIEW OF RELATED LITERATURE

Introduction

The U.S. Department of Education mandates that all public school students in grades K-12 be educated in the least restrictive environment (U.S. Department of Education, 2002). As regular education classrooms are seeing more students with disabilities, there is a need to examine attitudes and teachers in training regarding individuals with disabilities. As reported by Barr and Bracchitta (2008), discriminatory behavior and stereotyping often occurs when there are negative attitudes about a group of persons. In the education field, these negative attitudes towards individuals with disabilities can be seen in the form of exclusion and avoidance (2008). They went on to describe that in previous research, teachers had concerns that the students with disabilities would dominate their time and energy.

Aside from the possibility of negative attitudes from teachers towards inclusion of students with disabilities in the general physical education (GPE) classroom, they are often unprepared to teach, accommodate, and modify instruction for their students with special needs. It is possible that the only training they have received at during their teacher preparation programs at the university level was one three-credit introductory course or no coursework at all.

In the article “Is one” (2009), professors in the field of physical education and APE respond to the question, “Is one three-credit course in adapted physical education
sufficient for general physical educators?" An assistant professor from a Big Ten University who teaches an introductory APE course says that providing quality content knowledge and clinical experience in one three-credit class is very difficult.

Another health and physical education assistant professor, from a different university, feels differently. The three-credit course can be sufficient if it provides hands-on opportunities to interact with students with disabilities. The professor goes on to offer that some students may indicate a desire to seek additional experiences in the field of APE that will allow them to become certified to work with students with disabilities.

The American Association for Physical Activity and Recreation (AAPAR), however, recommends 12 hours of coursework focusing on students with disabilities, and 9 hours of coursework specifically in the area of APE (Lytle, Miller, Grenier, & Block, 2010). Thus there are many different visions of what is minimal coursework for someone who teaches APE.

Attitudes of Teacher Education Students towards Students Who Have a Disability

In an article focusing on the effect of contact with individuals with disabilities, researchers have found that attitudes among students majoring in education were more positive when there is social contact (Barr & Bracchitta, 2008). The researchers began their study with the intent to examine whether a college student having contact with individuals with disabilities would result in the choice to major in the teacher education field. They also wanted to investigate if the contact would have an impact on the college students' attitudes towards individuals with disabilities. Finally, they wanted to combine the two research questions to determine if there is a relationship between the degree of positive attitude and the desire to enter into teacher education (2008).
In their study, the researchers compared education majors and non-education majors in the amount of contact with individuals with disabilities. Further, they determined the relationships between contact and hopelessness, optimism, and misconceptions (Barr & Bracchitta, 2008). A total of 211 participants, ranging in age from 18-21 years, participated in this study. Women made up the majority of the participants with a total of 171 women. Education majors made up 66.4% of the study, and non-education majors made up the remaining 33.6%. The researchers selected a survey that measured attitudes, behavior, contact, and demographic information from the participants. In the survey, participants read three different disability scenarios (physical disability, intellectual disability, and behavioral disability) and responded using the Scale of Attitudes toward Disabled Persons (SADP). The SADP consisted of statements within each subscale which were rated using a 5 point Likert scale of (1 = disagree very much, 5 = agree very much).

The researchers found that more contact with individuals with disabilities was associated with more positive attitudes (Barr & Bracchitta, 2008). This suggests that contact with individuals with disabilities may allow for a more accurate view and better understanding of the individual. An implication of their research suggests that teacher training for education majors should allow hands-on experiences for the preservice teachers to change their attitudes towards individuals with disabilities. Also, the researchers advocated that preservice teachers should possess a greater sense of optimism and a decreased sense of hopelessness in order to become an effective teacher for individuals with disabilities.
Attitudes of Physical Education Educators towards Students with a Disability

Another study examined the effects of clinical experiences of physical education preservice teachers on attitudes towards students with disabilities. Two groups of students enrolled in an adapted physical education (APE) methods class in separate academic quarters had the choice in a practical experience involving recreational swimming, Special Olympics, and fitness programming. Each of these experiences required contact with individuals with disabilities, or with older persons in an aquatics setting. The students met for their desired practical experiences for 2 hours a week for a total of 10-weeks (Stewart, 1990).

A total of 48 undergraduate physical education majors and 43 undergraduate physical education majors (control group) participated in this study (Stewart, 1990). Using the Attitudes toward Disabled Persons Scale (SADP), the participants responded to statements using a 5-point Likert scale. The ATDP is designed to measure general acceptance or prejudice towards individuals with disabilities.

From his study, the researcher concluded that direct contact between the preservice teachers and persons with disabilities, even as a result of only one class, had a positive impact on the attitudes of the teachers. The students enrolled in the APE class experienced significant increases in their general attitude toward individuals with disabilities. Preservice teachers who had a clinical experience where they worked with individuals with disabilities of their own age at their university had greater improvements in attitudes than those who worked with older populations. Findings from this study and the author’s previous research suggests that the most meaningful clinical for preservice
teachers was one where the interaction occurred between individuals with disabilities who were close in age to the preservice teachers.

For teacher preparation programs, this suggests that the type of practical or clinical experience necessary for preservice teachers to enhance positive attitudes toward individuals with disabilities is one where the preservice teachers are working directly with an individual with a disability who is close to their age. Stewart goes on to propose that the clinical experiences be structured in a way to encourage more than simple exposure to individuals with disabilities. A successful clinical experience should offer opportunities for interaction, communication, and teamwork between the nondisabled individual and the individual with a disability.

Another study by Combs, Elliot, and Whipple (2010) examined physical education teachers’ attitudes towards inclusion. A qualitative approach to the study was used and consisted of interviews and surveys among two physical education teachers with positive attitudes towards inclusion and two physical education teachers with negative attitudes towards inclusion.

The researchers used the Physical Educators Attitudes Toward Teaching Individuals with Disabilities - III (PEATID - III) as the survey for the study. The PEATID - III consists of a series of statements that require the teacher to express his or her beliefs about teaching individuals with disabilities in their GPE classes. The PEATID - III questionnaire was mailed to the schools that gave permission for the researcher to conduct the study. Included in the packet of the questionnaire were questions regarding the grade level taught by the teacher, the inclusion practices for children with intellectual disabilities in the GPE class, whether the student with a disability came to GPE with a
teacher aid, how many years of teaching experience the teacher had completed, and whether the teacher would be participating in a 60-90 minute interview.

The PEATID - III consisted of 12 statements such as “Teaching students labeled as mild/moderate mental disabilities in regular physical education classes with nondisabled students will disrupt the harmony of the class”. For each statement, a 5-point Likert scale (1=strongly disagree, 5=strongly agree) was used.

Using a purposeful sampling technique, the researchers selected four physical education teachers as participants in the study. Particularly, the researchers were able to use extreme purposeful sampling using the 26 returned surveys and selecting the two teachers on the most extreme ends of the continuum. The four physical education teachers had at least 6 years of teaching experience and no more than 18 years of experience. All four teachers had considerable experience teaching GPE classes with students with disabilities ranging from mild to moderate. During the interviews, the researchers investigated topics using open-ended questions and offered probing questions when necessary and were careful not to provide leading questions.

After studying each of the physical education teachers’ comments and stories, the researchers developed four assertions. First, teachers who identified multiple focus areas of objectives in physical education had more positive attitudes towards inclusion. When the physical education teachers had many focus areas, such as development in self-esteem/self-confidence, movement ability, and motor skill performance, they were more likely to present a more positive attitude towards inclusion than the physical education teachers who presented only one focus area. The physical education teachers with
negative attitudes towards inclusion reported focus areas as solely sport skill acquisition or solely fitness skills.

The second assertion made by the researchers was that teachers who developed written lesson plans utilized many different teaching strategies had more positive attitudes. It was found that the physical education teachers who wrote lesson plans that considered the needs of all students were able to individualize instruction and provide accommodations for students with disabilities. These teachers reported more positive attitudes towards inclusion in the GPE classroom. On the contrary, the physical education teachers who did not write lesson plans reported that planning for special accommodations for their students was not necessary. One teacher felt as though students who attended GPE without a teacher aid should be able to perform at the same level as the rest of the students, therefore special consideration should not be paid. The other physical education teacher felt it would be too much work to write special considerations for every game for every student with a disability.

The third assertion developed was that teachers who completed coursework and training specifically with teaching students with disabilities had positive attitudes towards inclusion. The two teachers with positive attitudes towards inclusion of students with disabilities had coursework and training that specifically dealt with how to include students with disabilities in the GPE classroom. Both teachers felt as though this training had a great impact on their attitudes towards inclusion as well as their self-efficacy in successfully including students with special needs in their classrooms. The two teachers with negative attitudes towards inclusion had no special training in the area of APE. Both teachers reported feelings of unpreparedness towards teaching students with disabilities.
One teacher commented on a previous request of the district physical education supervisor to provide opportunities for more in-services that dealt with inclusion.

The final assertion was that all four teachers wanted their students to be successful, although there were notable differences in what success meant between the two groups of teachers. The teachers who possessed a more positive attitude towards inclusion felt that success was defined as changes in students' feelings of self-confidence and self-esteem, and that successfully acquiring skills would directly benefit the student. The teachers with negative attitudes towards inclusion felt that student success made them feel like effective teachers.

Practical implications from this research suggest that attitudes toward inclusion should be investigated when hiring physical education teachers. Also, the physical education emphasis should shift away from traditional games and sports, a curricula that traditionally has been contributed to the resistance of including students with disabilities in the GPE classroom.

Nondisabled Persons’ Attitudes Toward Persons with Disabilities

In a study focusing on the impact of volunteering on attitudes, researchers examine whether a volunteer experience with children can affect attitudes toward adults with disabilities (Fichten, et al 2005). The researchers refer to previous data which implies that nondisabled individuals tend to express anxiety and uneasiness with peers who have disabilities, therefore harboring negative attitudes towards individuals with disabilities. The research presented by Stewart (1990) found that when contact with individuals with disabilities occurs between persons who are close in age, higher feelings of positive attitude are reported. The researchers in this study are seeking to investigate
the impact of working with children with disabilities on the adults’ attitudes toward their peers, or other adults with attitudes (Fichten, et al 2005).

The researchers designed their study to utilize adult volunteers at a Canadian program assisting children with physical disabilities and children with hearing impairments. The participants included 71 individuals (55 women and 16 men) who were new volunteers to the program (Fichten, et al 2005). The researchers administered a packet of questionnaires to the volunteers participating in the study a total of three times. A limitation faced during this research was the high dropout rate among volunteers which impeded the researchers ability to test all 71 volunteers three times. At the end of the study, a total of 45 volunteers had contributed to the program long enough to be surveyed three times.

Despite limitations, the researchers found significant improvements from pre- to post volunteering on all three variables: more self-focused attitudes, less discomfort, and a better balance between positive and negative self-focused thinking. They also concluded that adults who work with children with intellectual disabilities can change components of self-focused attitudes and social distance (Fichten, 2005). While the setting in which the research took place was not conducive to changing adults’ stereotypes and negative attitudes, the researchers believe that the best settings to investigate such changes would occur in inclusive workplaces and community and recreation groups where there where similar numbers of persons with and without disabilities working together toward a common goal.

Another study focused on the negative attitudes towards persons with physical disabilities (Krahe & Altwasser, 2006). This study was conducted using pre- and post
tests and three different intervention methods in attempt to change negative attitudes towards persons with physical disabilities. Seventy 9th grade students participated in the study with an average age of 14.8. The 26 male students and 44 female students were randomly assigned to one of three experimental conditions: cognitive intervention, combined cognitive and behavioral intervention, and no intervention control.

The researchers collected data on three separate occasions. Baseline data was measured initially, followed by an intervention and another data collection measurement. The third and final data collection was done three months after the intervention (Krahe & Altwasser, 2006). The instrument used was the Questionnaire about Attitudes towards the Physically Disabled (1983). This instrument consisted of 38 negative statements about persons with physical disabilities presented with a 7-point Likert scale with responses ranging from 0 (totally disagree) to 6 (totally agree).

The interventions were designed to encourage attitude change by addressing the cognitive level in both experimental groups and by providing behavioral experiences to the cognitive and behavioral intervention group (Krahe & Altwasser, 2006). The cognitive intervention consisted of elements such as a discussion about personal experiences interacting with persons with physical disabilities as well as a discussion on the issue of interacting with persons with physical disabilities. The cognitive intervention sought to present person with physical disabilities as “normal” people in their thoughts and feelings who were capable of athletic performance not within reach of the average person without disabilities. The cognitive and behavioral intervention group received one session with the cognitive intervention group as well as a session of activities in a gym setting with persons with physical disabilities. Nine athletes with physical disabilities
presented hands-on instruction about three Paralympic sports: goalball, wheelchair basketball, and sitting volleyball.

The results of this study indicated that there was a significant change in attitude towards persons with physical disabilities following a cognitive and behavioral intervention (Krahe & Altwasser, 2006). The changes in attitude were found to be strongest immediately following the intervention, however still significant three months later. In addition, it is important to note that the cognitive intervention group presented changes in attitude immediately following the intervention, but the changes were not significant in the three-month follow-up survey. This research suggests that an intervention that combines both cognitive and behavioral sessions will be most successful in producing a change from negative attitude toward positive.

Summary

This review centered on the attitudes of adults, educators, and peers towards individuals with disabilities. As practices shift toward the inclusion of students with disabilities in the educational setting, general physical educators are striving to prepare for accommodations and considerations of students with special needs in their classrooms. Teachers emerging from university physical education teacher preparation programs should possess positive attitudes towards inclusion as well as confidence in their ability to provide meaningful physical education services to these students (Webb, et al 2011). Continued research should be conducted examining successful strategies in APE methods courses as well as practical experiences necessary for feelings of self-efficacy.
From the research presented, positive attitudes towards inclusion are most likely to occur as a result of a direct, hands-on experience working with individuals with disabilities. There are many different ways for preservice teachers to gain factual and practical knowledge towards individuals with disabilities, but research has yet to uncover the best method. It can be concluded from current research studies that the more practical experiences a teacher candidate can acquire, the higher their feelings of self-efficacy.

The results of these studies also indicate that a change in attitudes towards individuals with disabilities is possible. Whether because of an intervention or a clinical experience, the possibility for an individual to change over time can occur (Everhart, 2009). In terms of education, the changes concerning a more positive attitude toward inclusion are essential for the success of all students. Students with and without disabilities should learn in a classroom that promotes tolerance and acceptance for all students. Teachers play a pivotal role in creating a learning environment that is conducive to learn for all students. In physical education, if the teacher can offer nothing more than a positive attitude, he or she still has the ability to level the playing field for students with and without disabilities.
REFERENCES


APPENDIX B

SITUATIONAL-SPECIFIC SELF EFFICACY AND INCLUSION OF STUDENTS WITH DISABILITIES IN PHYSICAL EDUCATION SURVEY
Situational-Specific Self-Efficacy and Inclusion of Students with Disabilities in Physical Education

Version 3.3 – May 17, 2010

Martin E. Block, Ph.D., University of Virginia, USA
Aija Klavina, Ph.D., Latvian Sports Academy, Latvia
Shayke Hutzler, Ph.D., Wingate University, Israel
Situational-Specific Self-Efficacy and Inclusion of Students with Disabilities in Physical Education

Directions: This survey is designed to investigate your self-efficacy towards including a student with an intellectual, physical, or visual disability into your high school general physical education program. We define self-efficacy as your personal judgment of your competence or your confidence in your ability to carry out a goal or task (Bandura, 1986). In this case, we want to find your personal judgment of how confident you are in your ability to accommodate a student with an intellectual, physical, or visual disability who is included in your general physical education classes. The competency scale for each question is from 1 (no confidence) to 5 (complete confidence). There are no right or wrong answers, and every physical educator will answer these questions differently. We only want to find out how confident you feel in your ability to accommodate a student with an intellectual, physical, or visual disability like the ones described below into your general physical education class. The survey ends with some demographic questions. Your participation is voluntary and completely confidential. Your pre and post surveys will be matched for statistical purposes only. Your name will not be used in any reports. Your completion of this survey indicates your informed consent to partake in this study.

Part 1 – Intellectual Disability

Below you will see a description of a student with an intellectual disability. This will be followed by a series of questions about how competent/capable you feel about making certain accommodations for this student. You will then see a description of a student with a physical disability followed by another series of questions. Answer these questions as if this student is going to be in your general physical education class next week. The competency scale for each question is from 0 (cannot do at all) to 4 (highly certain can do).

****************

Description of Student with an Intellectual Disability

Noah is a high school student with an intellectual disability, so he doesn't learn as quickly as his classmates. Because of his intellectual disability he also doesn't talk very well, so sometimes it is hard to understand what he is saying. However, he will point or gesture to help people know what he wants. He also has trouble understanding verbal directions, particularly when the directions have multiple steps. Noah likes playing the same sports as his classmates, but he does not do very well when playing actual games. Even though he can run, he is slower than his peers and tires easily. He can throw, but not very far, and he can catch balls that are tossed directly to
him. He likes soccer, but he cannot kick a ball very far, and he never can remember where to go on the field. He also likes basketball, but he does not have enough skill to dribble without losing the ball, and he is not coordinated enough to make a basket. He also does not really know the rules for basketball or other team sports, and he easily gets distracted and off task during the game.

***************

Please rate how certain you are that you can do the things listed below by writing the appropriate number from 1-5 using the scale given below after each question.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Confidence</td>
<td>low Confidence</td>
<td>Moderate Confidence</td>
<td>High Confidence</td>
<td>Complete Confidence</td>
</tr>
</tbody>
</table>

Questions a-c: You are conducting physical fitness testing with your 9th grade physical education class of 30 students that includes Noah.

**Confidence (1-5)**

a. How confident are you in your ability to keep Noah on task during fitness testing?

b. How confident are you in your ability to modify the test for Noah?

c. How confident are you in your ability to instruct peers to help Noah during fitness testing?

Questions d-h: You are conducting a team sport unit such as volleyball, basketball, or soccer to your 9th grade physical education class of 30 students that includes Noah. You are in the first week of the unit, and you are teaching the basic skills of the sport (ex, the bump, set, and serve in volleyball).
d. How confident are you in your ability to **modify your instructions to help Noah understand what to do** when teaching sport skills?

 e. How confident are you in your ability to help Noah **stay on task** when teaching sport skills?

 f. How confident are you in your ability to **modify equipment** to help Noah when teaching sport skills?

 g. How confident are you in your ability to **modify the actual skills** to help Noah when teaching sport skills?

 h. How confident are you in your ability to **instruct peers to help Noah** when teaching sport skills?

 Questions i-k: You are conducting a team sport unit such as volleyball, basketball, or soccer to your 9th grade physical education class of 30 students that includes Noah. You are in the last week of the unit, and you are now having your students play the actual game.

 Confidence

 i. How confident are you in your ability to **modify rules of the game** for Noah?

 j. How confident are you in your ability to help Noah **stay on task** during the game?

 k. How confident are you in your ability to **instruct peers to help Noah** during the game?
Situational-Specific Self-Efficacy and Inclusion of Students with Disabilities in Physical Education

Part 2 – Physical Disability

Below you will see a description of a student with a physical disability. This will be followed by a series of questions about how competent/capable you feel about making certain accommodations for this student. As was the case above, answer these questions as if this student is going to be in your general physical education class next week. The competency scale for each question is from 1 (cannot do at all) to 5 (highly certain can do).

Description of a Student with a Physical Disability

Ashton is a high school student with a spinal cord injury. He cannot walk, so instead he pushes himself in his wheelchair to get around. Ashton likes playing the same sports as his classmates, but he does not do very well when playing the actual game. Even though he can push his wheelchair, he is slower than others and tires after pushing his chair for only 1-2 minutes. He can pass and serve a volleyball, but not far enough to get it over the net. He can catch balls tossed straight to him. However, he does not have the upper body strength to shoot a basketball high enough to make a regulation basket. Because he cannot use his legs, he cannot kick a soccer ball, but he can push the ball forward with his chair.

Please rate how certain you are that you can do the things listed below by writing the appropriate number from 1-5 using the scale given below after each question.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Confidence</td>
<td>low Confidence</td>
<td>Moderate Confidence</td>
<td>High Confidence</td>
<td>Complete Confidence</td>
</tr>
</tbody>
</table>

Questions a-d: You are conducting physical fitness testing with your 9th grade physical education class of 30 students that includes Ashton.

Confidence

(1-5)
a. How confident are you in your ability to create individual goals for Ashton during fitness testing?

b. How confident are you in your ability to modify the test for Ashton?

c. How confident are you in your ability to instruct peers to help Ashton during fitness testing?

d. How confident are you in your ability to make the environment safe for Ashton during fitness testing?

Questions e-h: You are conducting a team sport unit such as volleyball, basketball, or soccer to your 9th grade physical education class of 30 students that includes Ashton. You are in the first week of the unit, and you are teaching the basic skills of the sport (ex, the bump, set, and serve in volleyball.

Confidence (1-5)

e. How confident are you in your ability to make modifications to sports skills if Ashton cannot perform like his peers when you are teaching sport skills?

f. How confident are you in your ability to make the environment safe for Ashton when teaching sport skills?

g. How confident are you in your ability to modify equipment to help Ashton when teaching sport skills?

h. How confident are you in your ability to instruct peers to help Ashton when teaching sport skills?
Questions i-l: You are conducting a team sport unit such as volleyball, basketball, or soccer to your 9th grade physical education class of 30 students that includes Ashton. You are in the last week of the unit, and you are now having your students play the actual game.

Confidence (1-5)

i. How confident are you in your ability to modify rules of the game for Ashton?

j. How confident are you in your ability to modify equipment to help Ashton during the game?

k. How confident are you in your ability to make the environment safe for Ashton during the game?

l. How confident are you in your ability to instruct peers to help Ashton when teaching sport skills?
Situational-Specific Self-Efficacy and Inclusion of Students with Disabilities in Physical Education

Part 3 – Visual Disability

Below you will see a description of a student with a visual disability. This will be followed by a series of questions about how competent/capable you feel about making certain accommodations for this student. As was the case above, answer these questions as if this student is going to be in your general physical education class next week. The competency scale for each question is from 1 (cannot do at all) to 5 (highly certain can do).

********************

Description of a Student with a Visual Disability

Sofia is a high school student. She has severe visual impairment, so she can only see people and objects when they are really close to her. She likes physical activity, and her fitness level is comparable to her peers. She needs physical assistance to safely move around physical education settings. For example, she holds onto a peer’s elbow and listens to her peer’s auditory cues when she does the mile run. Also, her vision is not good enough to see demonstrations, so she needs verbal instructions and someone guiding her through the movement to understand how to perform a skill. When playing a team sport (e.g., basketball, volleyball, soccer), she needs someone with her for safety and to make sure she knows where she is on the field, and she needs a ball with auditory cues to know where the ball is during the game. Regarding her skill level, she cannot catch a ball, but she can throw or kick the ball towards an auditory target.

********************

Please rate how certain you are that you can do the things listed below by writing the appropriate number from 1-5 using the scale given below after each question.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Confidence</td>
<td>Low Confidence</td>
<td>Moderate Confidence</td>
<td>High Confidence</td>
<td>Complete Confidence</td>
</tr>
</tbody>
</table>

Questions a-c: You are conducting physical fitness testing with your 9th grade physical education class of 30 students that includes Sofia.
Confidence

(1-5)

a. How confident are you in your ability to make the environment safe for Sofia during fitness testing?

b. How confident are you in your ability to instruct peers to help Sofia during fitness testing?

c. How confident are you in your ability to modify the fitness testing requirements for Sofia during fitness testing?

Questions d-g: You are conducting a team sport unit such as volleyball, basketball, or soccer to your 9th grade physical education class of 30 students that includes Sofia. You are in the first week of the unit, and you are teaching the basic skills of the sport (ex, the bump, set, and serve in volleyball.

Confidence

(1-5)

d. How confident are you in your ability to modify instructions to help Sofia when teaching sport skills?

e. How confident are you in your ability to instruct peers to help Sofia when teaching sport skills?

f. How confident are you in your ability to modify equipment to help Sofia when teaching sport skills?

g. How confident are you in your ability to make the environment safe for Sofia during fitness testing?
Questions h-j: You are conducting a team sport unit such as volleyball, basketball, or soccer to your 9th grade physical education class of 30 students that includes Sofia. You are in the last week of the unit, and you are now having your students play the actual game.

Confidence (1-5)

h. How confident are you in your ability to make the environment safe for Sofia during the game?

i. How confident are you in your ability to instruct peers to help Sofia during the game?

j. How confident are you in your ability to modify rules of the game for Sofia?
Part 4 – Demographic Questions

1. ________ Your age

2. ________ Your year in college (e.g., 2nd year, 3rd year, 4th year)

3. ________ Have you had a general physical education clinical in a middle or high school?

4. ________ Coursework in adapted physical education (APE) (e.g., 1 course, 2 courses, etc.)

5. ________ Are you enrolled in an undergraduate minor or concentration in APE?

6. ________ Did your APE course have a clinical with students with disabilities?
   (yes/no)

7. ________ If yes to #6 above, was the clinical practicum (check all that apply):
   a. ___ working with a student with a disability 1-on-1 at your college/university?
   b. ___ working with a small group of students with disabilities at your college/university?
   c. ___ working with a student with a disability 1-on-1 in a local school?
   d. ___ working with a small group of students with disabilities in a local school?
   e. ___ assisting a student being included in a general physical education class?

8. What are your experiences with the following students with physical, intellectual, or visual disabilities in physical education or community sports?

<table>
<thead>
<tr>
<th>No experience</th>
<th>Once or twice</th>
<th>Several times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual disability</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>Physical disability</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>Visual disability</td>
<td>______</td>
<td>______</td>
</tr>
</tbody>
</table>

9. What are your personal experiences with people with intellectual, physical, or visual disabilities?
<table>
<thead>
<tr>
<th>Disability</th>
<th>Family member</th>
<th>A friend</th>
<th>at school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual disability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical disability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual disability</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
QUALITATIVE INTERVIEW QUESTIONS

Core Content Knowledge acquisition (in class)

What special education and adapted physical education knowledge was emphasized in this course?

What special education or adapted physical education knowledge do you feel that you still need in order to effectively teach SWDs in GPE?

From this experience, do you feel you need to learn more or less content information regarding special education and adapted physical education in order to effectively teach students with disabilities?

Pedagogical Knowledge/Skill (in clinical experience)

What specific teaching skills have you learned in this experience that enabled you to teach SWDs?

How and why has your ability to teach students with disabilities changed as a result of this experience?

What was it about this experience that made you feel this way?

What specific experiences in MDP have helped you become a better teacher with SWDs in GPE?

What knowledge of teaching SWDs have you gained as a result of this experience?

Areas of need/areas for improvement

What could be done differently (either in the class portion or clinical experience) to help you improve your self-efficacy as a teacher?

What additional professional development practical experiences do you feel you need in this class in order to effectively teach SWDs?

What additional professional practical experiences do you feel you need in the future in order to more effectively teach SWDs?

What could you have done better or more of to improve your performance in the course? In MDP?
What would you do to improve the course and clinical (MDP) experiences obtained by ESS 231 students in the MDP?

Mentorship/Supervision

In what ways did the supervision/leadership provided to you by the MDP staff help you to enhance your knowledge and skills as a future teacher for SWDs?

What strategies implemented by the leadership in MDP were useful in providing an appropriate model for preservice teachers instructing SWDs?
APPENDIX D

EMAIL TO RECRUIT PARTICIPANTS IN INTERVIEW
ESS 231 Fall 2011
ESS 231 Spring 2012

Dear PETE Student,

I am a graduate student in the UW-La Crosse Adapted Physical Education Graduate program and am conducting a study investigating the effects of an introductory adapted physical education course on the self-efficacy towards teaching school children with disabilities. You have been identified as a student who has taken the course, ESS 231: Introduction to Adapted Physical Education Teaching (3 credits) either this past Fall 2011 or during this current Spring 2012 semester. I am requesting your involvement in this study by participating in a face-to-face interview to discuss various aspects of the course that are perceived as beneficial or not beneficial towards your ability to teach school children with disabilities. This confidential interview would take no more than 1 hour and will be conducted in a private office setting on the UW-L campus. As a participant in the study, you have the right to not answer any question(s) or terminate your participation at any time without penalty whatsoever if you choose to do so for any reason.

If you are willing to participate, please reply back to this email by April 23, 2012. Replying back to this email does not necessarily indicate that you have been accepted as a participant. If there are too many volunteers, then a random sample of participants will be chosen. In any case, you will be notified with one week of your reply. If you are selected to participate, we will then choose a mutual time when you will be informed of your rights and provide consent to participate as well as conduct the interview.

Please contact me if you have any questions about this study via email or phone (below). Thank you for your consideration to participate in this interview. I hope many of you will consider this unique opportunity in adapted physical education research.

Sincerely,

Rachel Smith
APE Graduate Student
mobile: (217) 899-3813
office: (608) 785-8695
e-mail: smith.rac2@uw.lax.edu
APPENDIX E

INSTITUTIONAL REVIEW BOARD DOCUMENTATION
IRB Narrative Statement

Title: Effectiveness of Physical Education Teacher Preparation Experiences on Adapted Physical Education Instructional Self-Efficacy and Attitudes Towards Students with Disabilities: A Qualitative Study

1. Purpose of Proposed Research: One purpose of this study is to examine the effects of an introductory adapted physical education course on physical education teacher education (PETE) candidates’ self-efficacy toward teaching students with disabilities in physical education settings. This physical education course is ESS 231: Introduction to Adapted Physical Education Teaching (3 credits) which consists of two, 1-hour lectures per week and a 3 hour practical lab per week.

(In this part of the project, the UWL IRB under a current project directed by Dr. Garth Tymeson has already approved survey data collection procedures. This IRB proposal is NOT seeking approval to collect this survey data.)

A secondary purpose of this project is to determine underlying and specific aspects of the course that influenced their self-efficacy.

(Because this will require the use of interview data collection methodology which has not been previously approved by the IRB, this proposal seeks IRB approval for this aspect of data collection in this project.)

Preservice PETE candidates are provided with a clinical experience where teaching and working with students with disabilities is the focus area. When hands-on clinical teaching experiences are required, teacher preparation programs can provide teachers an opportunity to gain self-efficacy when teaching in an inclusive general physical education setting. It is reasonable to believe that PETE candidates will experience an increase in self-efficacy towards teaching students with a disability as a result of their participation in an introductory adapted physical education course which includes a supervised practicum experience. Thus, they may have a more positive attitude towards the presence of students with disabilities in inclusive classrooms.

This study will provide professors in physical education-teacher education preparation programs at colleges and universities in-depth information, common trends, and themes regarding teaching students with disabilities and attitudes towards these students as expressed by preservice PETE candidates in the field. The research will reflect the importance of clinical coursework accompanying a lecture course taken during the teacher preparation program. This research will also provide data regarding the self-efficacy towards teaching students with a variety of disabilities in an inclusive setting.

The participants in this study will come from two cohorts of preservice physical education majors at the University of Wisconsin-La Crosse who completed the survey course, Introduction to Adapted Physical Education Teaching (ESS 231). Participants will be informed of the study and can express desire to be involved in the study. Should the students in the course express desire to participate in the study, their name will be placed in a random computer
generated numbering system to select 7 participants from each cohort for a total of 14 participants to participate in the interview portion of this study.

Collection of interview data will occur upon IRB approval with the first cohort of students from the Fall 2011 course of ESS-231, Introduction to Adapted Physical Education. All interviews will be audio-recorded and be analyzed only by the researcher, Rachel Smith. All recordings will be stored in a locked file cabinet in office 115 in Wittich Hall on the campus of the University of Wisconsin-La Crosse. Please see attached interview questions.

**Beginning/Ending Dates:** The study will begin upon IRB approval with the first cohort of students from the Fall 2011 Introduction to Adapted Physical Education (ESS 231) course. The study will end roughly May 18, 2012 with the completion of all one-on-one interviews.

2. **Subject Population:** The participants in this study will come from two cohorts of preservice physical education majors at the University of Wisconsin-La Crosse who completed a survey course in the area of adapted physical education (ESS-231). Participants will range in age from approximately 19-23 years. Participants will be informed of the study via email (attached) and can express desire to be involved in a one-on-one interview. Participant email addresses will be gathered from class lists of the Fall 2011 and Spring 2012 semesters provided by Dr. Garth Tymeson who is the course instructor. Individuals who are interested in participating will reply back to indicate their interest to participate. A total of 14 participants (7 from Fall 2011 and 7 from Spring 2012) are desired for this portion of the project. If there are more than 14 potential participants, they will all be assigned a number. Selection of participants will be based on a table of random numbers in order to select participants for the interview.

3. **Vulnerable Populations:** N/A

4. **Voluntary Informed Consent:** The participants agreeing to take part in a one-on-one interview will complete an informed consent form (see attached) prior to the interview.

5. **Confidentiality:** All information related to the study, including audio recordings will be kept confidential and stored in a locked file cabinet in office 115 in Wittich Hall on the campus of UW-L. The only individuals with access to this information will be the researcher, Rachel Smith, thesis committee chair, Dr. Manny Felix, and thesis committee members Dr. Garth Tymeson and Dr. Kristi Mally.

6. **Anticipated Risks and/or Inconveniences:** There are minimal risks for the participants in this study. Participants will be engaging in a one-on-one interview with the researcher that will last approximately 1 hour. The interview will occur at the participant’s convenience upon the fulfillments of requirements for ESS 231, Introduction to Adapted Physical Education. Traveling should be a minimal inconvenience as the interviews will be conducted on campus.

7. **Procedures to Minimize Risk:** In order to minimize any risk that may be experienced by the participant, the researcher will make accommodations to meet the needs of the participant. The one-on-one interviews will be conducted in a closed-door office setting with no distractions on the campus of the University of Wisconsin-La Crosse. The participant will be reminded that the audio-recordings will be kept confidential and the responses provided to the questions will not affect their grade for the ESS 231, Introduction to Adapted Physical Education course.
8. **Anticipated Benefits:** We do not anticipate any direct benefits to the participants as a result of participating in this study. In the future, the results of this study may provide insight into the design of physical education-teacher education programs for preservice teachers at the university level. Findings will allow current college and university survey courses in adapted physical education to evaluate and reform existing clinical experiences and coursework to better meet the needs of their preservice teachers. These college and university physical education-teacher education programs will be able to determine the effectiveness of a clinical experience accompanying a survey adapted physical education course. University-sponsored programs like the Motor Development Program may be created in the future to be used as a clinical experience for preservice teachers that can be influenced and enhanced by the information gathered in this study. Universities can use this information to provide additional instructional training to preservice teachers in the physical education field.
ATTACHMENT A - APPLICATION FOR UNIVERSITY IRB REVIEW
(All submissions must be typewritten) Date March 26, 2012

1. a. Principal Investigator/Project Director (if thesis or undergraduate research project, student’s name): Rachel Smith

b. Applicant Status: (Check all that apply)
   [ ] Faculty
   [ ] Academic Staff
   [x] Graduate Student
   [ ] Undergraduate Student

c. Investigator/Project Director Local Address:
   115 Wittich Hall, University of Wisconsin-La Crosse, La Crosse, WI 54601

d. Investigator/Project Director Local Telephone #: 608-785-3985
   E-mail: smith.rac2@uwlax.edu

2. a. Title of Proposed Project: Effectiveness of a three-credit adapted physical education course on confidence levels of preservice physical education teachers towards teaching students with disabilities

   Project Period: Begin Date: 03/26/12 End Date: 05/20/12

c. If a student project of any type, Faculty Advisor’s Name, Department, and Phone:
   Name: Dr. Emmanuel Felix
   Signature: ___________________________
   Department: Exercise and Sport Science
   Phone: 608-785-3801
   E-mail: efelix@uwlax.edu

   *Names and Signatures of Thesis Committee Members:
   Dr. Garth Tymeson
   Signature: ___________________________
   Dr. Kristin Mally
   Signature: ___________________________

3. If the researcher believes his/her project may be reviewed under expedited procedures (p. 6-9) and/or falls within the exemptible category, (p. 4-5) please check the appropriate box(es) below
   [ ] Expedited
   [ ] Exemptible

   a. If expedited, please indicate the number(s) of the categories listed on pages (6-8) ___
   b. If exemptible, please indicate the number(s) of the categories listed on pages (4-5) ___

4. By signing this application, I agree to comply with any decisions made by the University of Wisconsin-La Crosse IRB in regard to the above named research project, and or the standards of professional ethics in my field of study.
   ___________________________
   Signature
   3/26/12

The IRB has reviewed the above research project and has determined that:

1. [ ] APPROVAL IS GRANTED - as submitted or as modified per attached (check one)
   [ ] a. the protocol does not contain procedures which place human subjects at risk, or
   [ ] b. the protocol contains procedures which place human subjects at minimal but acceptable risk, or
   [ ] c. the protocol contains or is likely to contain procedures that may place human subjects at greater than minimal risk; however, the risk(s) are outweighed by the sum of the anticipated benefits of the research.

2. [ ] APPROVAL NOT GRANTED

   The following IRB members participated in this review:

   ___________________________
   ___________________________
   ___________________________
   ___________________________

   On behalf of the board:

   ___________________________
   __________________________

   IRB Chairperson or Coordinator Signature Date
Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that Rachel Smith successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 10/03/2011

Certification Number: 777919