UNIVERSITY OF WISCONSIN-LA CROSSE

Graduate Studies

PERCEIVED PROFESSINOAL DEVELOPMENT NEED OF GENERAL AND ADAPTED PHYSICAL EDCUATION TEACHERS

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

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Physical Education Teaching: Adapted Physical Education Emphasis

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PERCEIVED PROFESSIONAL DEVELOPMENT NEEDS OF GENERAL

AND ADAPTED PHYSICAL EDUCATION TEACHERS

By Scott S. Rosenfeld

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 Emphasis).

The candidate has completed the oral defense of the thesis.

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ABSTRACT

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Students with disabilities should receive adapted physical education (APE) services from a qualified APE and/or a general physical education (GPE) teacher. Current research, however, has shown that many teachers of students with disabilities feel unprepared and lack the confidence to teach these students. To ensure that students with disabilities receive appropriate and quality physical education, APE and GPE teachers should receive relevant professional development. The purpose of this study was to determine the perceived professional development needs of APE and GPE teachers regarding working with students who have disabilities. A total of 138 teachers (APE = 42, GPE = 45, and dual roles in APE/GPE = 51) completed an online survey to rank and rate 12 professional development content areas. Results indicated that all of the teachers combined felt they need professional development most in the areas of knowledge of disabilities and teaching and instructional strategies. APE teachers felt that behavior management and teaching and instructional strategies were the most important professional development content areas, while GPE teachers felt that knowledge of disabilities, inclusion techniques, and teaching and instructional strategies were the most important professional development content areas.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF APPENDICES

INTRODUCTION

Physical education is an important educational service for students with and without disabilities. Students with disabilities may receive physical education in a one-on-one setting, a class of many students with disabilities, and/or in an inclusive class. More than 93% of students with disabilities are taught in inclusive general physical education classes within public schools (Lieberman & Houston-Wilson, 2009).

The Education for All Handicapped Children Act (EAHCA, 1975) was established to help provide services for students with disabilities in their least restrictive environment (LRE). The most recent revision of this landmark legislation is the Individuals with Disabilities Education Act (IDEA, 2004). This federal legislation ensures that students with disabilities are provided a free and appropriate public education. The LRE whenever possible is the same education environment as students without disabilities with appropriate supports as needed (IDEA, 2004). Adapted physical education (APE) teachers provide instruction in a wide range of educational placements that are considered the most appropriate, including the general physical education classroom. The initial placement consideration for a child with a disability is to be educated to the maximum extent possible in the general (physical education) class.

When a student with a disability is placed in a general physical education (GPE) class, he or she has opportunities to receive the same physical, social, psychological, and cognitive benefits that students without disabilities receive. This also helps all students

(those with and without disabilities) to become more comfortable with each other and have more opportunities to develop positive social skills (Block, 2006). Thus, from an instructional perspective, there are numerous reasons why inclusion practices are valuable in supporting educational and noneducational objectives for all students (Lieberman & Houston-Wilson, 2009). In addition, from an administrative perspective, inclusion practices are also a significant component of educational reform in our U.S. society (Block, 2006).

Since the majority of the states in the U.S. do not have a certification or endorsement specifying who is highly qualified to teach APE, it is common that many GPE teachers assume the role of APE instructor. General physical education teachers usually have taken very few courses in APE during their college teacher preparation programs and may feel uncomfortable, unprepared, and unconfident teaching students with disabilities. Moreover, many teachers lack the proper professional preparation and knowledge to make an inclusive class successful (Block, 2006, Hardin, 2005, Kelly, 2006).

Since general and APE teachers work with students with disabilities in the inclusive classes, ongoing professional development is necessary to maximize positive student outcomes. For any teacher, there is much knowledge and many skills that could be enhanced and improved. Some common of areas professional development that teachers can further enhance are inclusion techniques, adapted equipment, behavior management strategies, knowledge of disabilities, individualized education program (IEP) process, peer teaching techniques, and collaborating with paraprofessionals. Other

less common but still important areas include activity/game modifications, teaching and instructional strategies, assessment, consultation and collaboration, and technology.

Determining what general and APE teachers value and need for their professional development is beneficial for several reasons. The information obtained can be used by school district physical education programs, higher education teacher preparation programs, and professional development conference organizers to better understand and target competencies that are most needed to effectively prepare teachers who work with students with disabilities. School district physical education programs can focus on the most important information needed for their physical education teachers' in-service professional development. Findings might also reveal if general and APE teachers have similar or different professional development needs.

Although many factors can influence the effectiveness of inclusive outcomes such as student and teacher attitudes, availability of modified equipment, classroom support, attitudes of the community, and socioeconomic status, this study will focus on the professional development of teachers who ultimately and directly implement inclusive practices. Positive inclusive outcomes are only evident for students if the teacher is both highly effective and well prepared.

Professional development, particularly in areas related instructing students with disabilities, is of such great importance and little is known about the perceived value of different areas of professional development among APE and GPE teachers. It was therefore the purpose of this study to examine and compare the perceived professional development needs of APE and GPE teachers related to teaching students with disabilities in physical education.

METHODS

Pilot Study

An online survey with items related to 12 professional development content areas (selected by means of a review of current literature and by a team of experts in the field of APE) was developed to examine values and needs for APE and GPE instructors related to their working with students with disabilities. To ensure effective survey procedures and to maximize validity, a pilot study was conducted with this instrument. In the pilot study, an initial draft of the online survey was distributed to four experienced APE teachers. These APE teachers completed and provided feedback to the researcher regarding the clarity, instructions, content, duration, and appearance of the survey.

After reviewing the feedback from the APE specialists, common issues were identified and used in the modification of the draft. The modified online survey was then reviewed by multiple professionals in higher education with expertise in APE. These professionals then deemed the survey valid.

Measures

Online Survey

The online survey was designed to gather: (a) demographics, (b) priority rankings of perceived professional development needs in content areas for physical education regarding working with students who have disabilities, and (c) priority ratings of content areas in physical education regarding working with students with disabilities. A copy of the survey can be found in Appendix A.

The online survey was developed using Qualtrics (a program that creates a working online survey) and consisted of closed and open-ended questions. To determine professional development priorities, a ranking scale that required dragging items to a specific order was used. Also, an analog rating scale slider was used to describe the participants' perceptions of importance towards various professional development areas. After the data collection period had ended, survey data were downloaded and imported into Microsoft Excel 2010 for statistical evaluations.

The first section of the survey determined the demographics of the participants. Items for this section gathered information on full time employment status, years of teaching experience, percentage of time teaching in different grade levels (preschool, elementary, middle, or high school), the state where currently employed, school location (rural, urban, suburban, or city), number of students in subject's school district, gender, age, highest level of education (including any post degree credits), possession of APE certification, the state where APE certification was obtained, how long subjects had been APE certified, and whether subjects had the national APE certification (Certified Adapted Physical Educator).

The second section of the survey was a ranking scale. All subjects including APE, GPE, and teachers who taught in both areas were asked to place content areas in rank order, using 1 for the most important and 12 for the least important. The 12 content areas were inclusion techniques, adapted equipment, behavior management, knowledge of disability, IEP process, peer teaching techniques, working with paraprofessionals, activity/game/content modifications, teaching and instructional strategies, assessment, technology and physical activity, and consultation and collaboration. Definitions of each

content area were provided by means of pop-up windows that appeared when subjects placed their cursors over the blue-highlighted names of content areas.

The third section of the survey included sliding scales to rate the subject's perceived importance of each of the 12 content areas listed in the previous section. The range for the sliders was from 0 (no importance) to 5 (most important). As with the previous section, definitions for each content area were provided by means of pop-up windows.

There was one final open-ended question at the conclusion of the survey. In this question, participants were asked if there were any content areas that were not represented in the study but should have been.

Procedures

Before the study began, approval was received from the University of Wisconsin-La Crosse Institutional Review Board for the Protection of Human Subjects. The instrument was then developed, piloted, modified, and sent to APE, GPE, and combined physical education teachers via various email distribution lists.

The Executive Director of Wisconsin Health and Physical Education sent an email request to all state executive directors affiliated within the American Alliance for Health, Physical Education, Recreation, and Dance (AAHPERD) requesting each to send a brief cover letter to their APE and GPE teacher mailing distribution lists via email in late spring of 2011. This cover letter provided details about informed consent, specific directions for completing the survey, and the purpose of the study. The cover letter also included a link to the online survey. This cover letter can be found in Appendix B. A second request for subject recruitment was mailed approximately 10 days later. It is not

known which executive directors from specific states emailed the cover letter to potential participants on their APE and GPE teacher distribution lists.

The survey took approximately 10 minutes to complete. This included time to: (a) read the cover letter in the email; (b) read the instructions for completing the survey; and (c) completing and submitting survey responses. Participants were encouraged to call or email the researcher with any questions regarding the instrument or other elements of the research project at any time during their completion of the survey.

RESULTS

Participants

This study included a total of 138 physical education teachers. Forty two primarily taught APE (30.4%), 45 primarily GPE (32.6%), and the remaining 51 taught a combination of APE and GPE (37.7%). Participants in the APE group included teachers who had at least .51 full time employment in APE. Participants in the GPE group included teachers who taught GPE with less than .09 full time employment in APE. Lastly, participants in the combined APE/GPE group included teachers who had full time employment including between .50 and .10 in APE.

The frequency and percentages of participants from each state are represented in Table1. This table breaks down the number and percentage of APE, GPE, and APE/GPE teachers in each state.

Table 1. Numbers and Percentages of Participants from Each State.

State	APE *f* (%)	GPE *f* (%)	APE/GPE *f* (%)	TOTAL *f* (%)
Wisconsin	3 (6)	24 (48)	23 (46)	50 (36.2)
New York	11 (24)	16 (35)	19 (41)	46 (33.3)
Minnesota	13 (68)	1 (5)	5 (27)	19 (13.8)
California	10 (83)	0 (0)	2 (17)	12 (11.5)
Illinois	3 (42)	2 (29)	2 (29)	7 (5.1)
Hawaii	1 (33)	2 (67)	0 (0)	3 (2.2)
Nevada	1 (100)	0 (0)	0 (0)	1 (.07)

Note: Percentage of APE, GPE, and APE/GPE teachers are compared to each state total. Percentage of TOTAL is based on the 138 total participants.

The demographics of APE, APE/GPE, and GPE teachers at each level of school are represented in Table 2. This table identifies the average age and years of experience (YOE) of the teachers as well as the number of respondents that taught in each level of school for each category. Some participants had mixed appointments and were counted in multiple levels of school.

Table 2. Average Age and Years of Experience of APE and GPE Teachers.

	APE			APE/GPE			GPE		
School	N	Age	YOE	N	Age	YOE	n	Age	YOE
High	26	45±11	17±10	15	40±11	15±10	12	45±10	18±8
Middle	26	44±11	17±10	17	44±9	18±9	18	48±11	21±10
Elementary	35	46±11	19±11	33	41±10	17±10	22	48±10	20±11
Preschool	14	45±12	19±12	6	34±9	10±9	1	49	26
Totals	101	45±11	18±11	71	49±10	15±10	53	48±8	21±8

Note: YOE=Years of experience

Priority of Ranking Content Areas for Professional Development Needs

The mean rankings for each of the 12 professional development areas for all three teacher groups are shown in Table 3. The lower a mean ranking score, the higher the priority for each perceived professional development area. Definitions of each professional development area are presented in Appendix C.

In the APE group, teachers prioritized behavior management and teaching and instructional strategies the highest. The next two highest professional development needs were knowledge of disabilities and activity/game/content modifications. The least important professional development area for the APE group was peer teaching techniques.

Table 3. APE, GPE, and APE/GPE Mean Rankings (1-12) on Perceived Professional Development Needs

Groups	n	Inclusion Techniques	Adapted Equipment	Behavior Management Strategies	Knowledge of Disabilities	IEP Process	Peer Teaching Techniques	Working with Paraprofessionals	Activity/Game/Content Modifications	Teaching and Instructional Strategies	Assessment	Technology and Physical Activity	Consultation and Collaboration
APE	42	6	7	4	5	6	9	6	5	4	6	7	8
APE/GPE	51	4	6	5	4	7	8	7	5	4	6	9	7
GPE	45	4	7	5	3	7	8	7	5	4	6	8	6

Note: 1 = highest priority; 12 = lowest priority

Teachers in the APE/GPE group had different perceived professional development needs than the APE group. The APE/GPE teachers ranked inclusion techniques, knowledge of disability, and teaching and instructional strategies as the most important areas of professional development needs. The least important professional development need for APE/GPE teachers was technology and physical activity.

Teachers in the GPE group had a different order of perceived importance compared to the APE group. The most important professional development need for the GPE group was knowledge of disabilities. Both inclusion techniques and teaching and instructional strategies received the next highest rankings. The least important professional development needs for this group were peer teaching techniques and technology and physical activity.

Figure 1 presents the mean ranking data in bar graph form. The bar graph presents the differences between groups for each of the professional development areas.

The biggest differences between APE teachers and GPE teachers were in the content areas of inclusion techniques (APE = 6, GPE = 4), knowledge of disabilities (APE =5, GPE = 3), and consultation and collaboration (APE = 8, GPE = 6). General physical education teachers felt that inclusion techniques were of much higher priority for professional development needs than did APE teachers. Although both APE and GPE teachers felt that knowledge of disabilities was important for professional development needs, GPE teachers felt that it was more important than did APE teachers. GPE teachers also felt that consultation and collaboration was more important for professional development than did APE teachers.

Figure 1 also indicates that some professional development needs were ranked similarly by all three categories of teachers. There were three content areas that the three groups agreed upon for perceived professional development needs. These professional development areas were activity/game/content modifications (scores = 5), teaching and instructional strategies (scores = 4), and assessment (scores = 6). All three agreed that activity/game/content modifications were very important to them when comparing to other professional development areas.

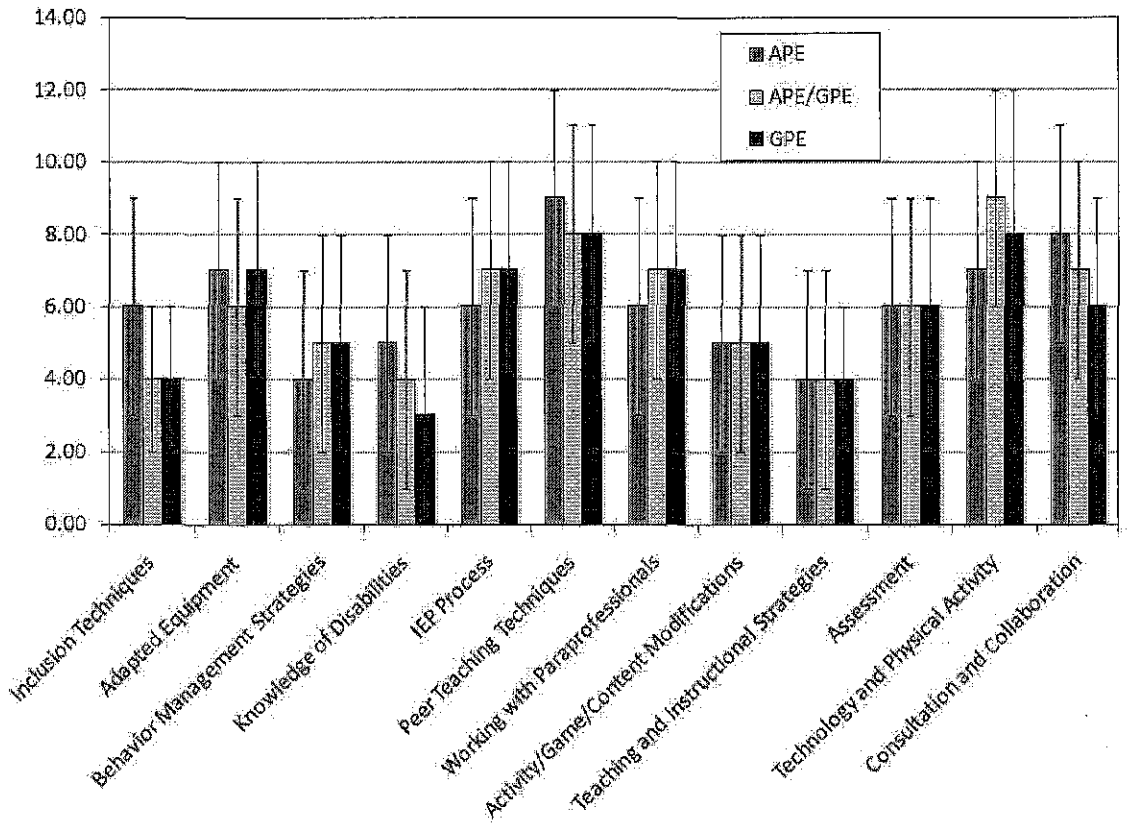

Figure 1. APE, GPE, and APE/GPE Mean Rankings (1-12) on Professional Development Areas
Note: 1 = highest priority; 12 = lowest priority

Priority of Rating Areas of Professional Development Needs

In the survey, all participants rated professional development needs using sliding analog scales. Each scale ranged from 0.00-5.00, with 0.00 labeled as very unimportant and 5.00 labeled as very important. The mean ratings had a positive relationship with the priority level of each content area. Mean scores for each professional development areas are presented in Table 4.

Table 4. APE, APE/GPE, and GPE Mean Ratings (0-5) on Professional Development Areas

Groups	n	Inclusion Techniques	Adapted Equipment	Behavior Management Strategies	Knowledge of Disabilities	IEP Process	Peer Teaching Techniques	Working with Paraprofessionals	Activity/Game/Content Modifications	Teaching and Instructional Strategies	Assessment	Technology and Physical Activity	Consultation and Collaboration
APE	42	4.00	3.90	4.54	4.07	3.89	3.55	4.06	4.13	4.38	4.21	3.64	3.99
APE/GPE	51	4.37	4.10	4.29	4.37	3.92	3.58	4.08	4.37	4.44	4.18	3.50	4.16
GPE	45	4.41	3.82	4.08	4.59	3.56	3.54	3.95	4.38	4.42	3.91	3.50	4.14

Note: The higher the rating score, the higher the importance of that content area.

The most important content area for the APE teachers professional development was behavior management with a mean score of 4.54. The second most important content area for APE teachers was teaching and instructional strategies with a mean score of 4.38. The next two most important professional development areas that the APE teachers rated were assessment (mean of 4.21) and activity/game/content modification (mean of 4.13). APE teachers rated peer teaching techniques (mean of 3.55) and technology and physical activity (mean of 3.64) as the two least important.

Participants in the APE/GPE group rated teaching and instructional strategies as their most important content area with a mean of 4.44. The next highest rated content area was a tie between inclusion techniques, knowledge of disabilities, and activity/game/content modifications with a mean of 4.37.

GPE teachers had noticeably different ratings of importance than the other two groups of teachers. GPE teachers rated knowledge of disabilities (mean of 4.59) the

highest. Following that content area was teaching and instructional strategies (mean of 4.42), then inclusion techniques as number three with a mean of 4.41.

Figure 2 shows the rating scale means of all three groups. This bar graph shows the comparison of the three groups on how closely they were rated.

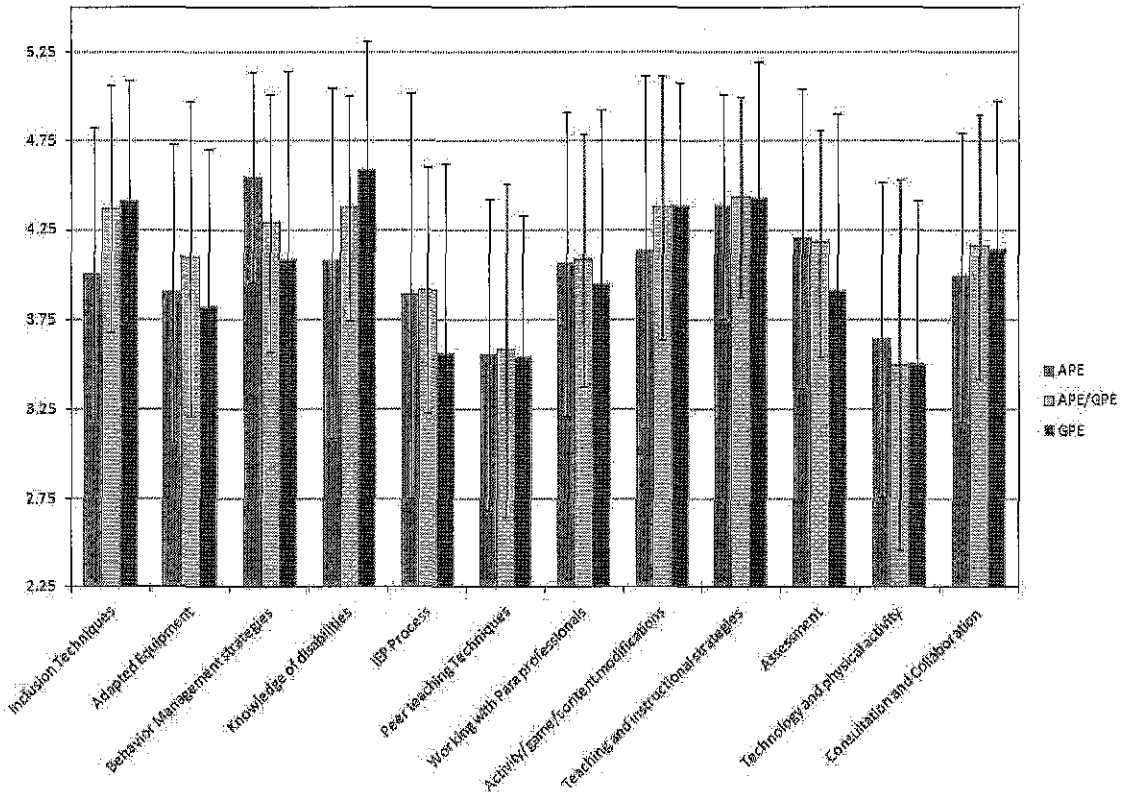

Figure 2. APE, APE/GPE, and GPE Mean Ratings of Professional Development Areas
Note: The higher the rating score, the higher the importance of that content area.

Figure 2 shows that teaching and instructional strategies was the most important professional development area overall. Knowledge of disabilities was the second highest and behavior management was the third highest professional development area overall. The least important professional development areas by all three groups were technology and physical activity and peer teaching techniques.

In addition, Figure 2 shows the similarities and differences between groups. The largest difference between APE and GPE teachers was the content area of knowledge of

disabilities. GPE teachers described that as very important while APE teachers only rated it as important. Behavior management was another large difference between groups, because APE teachers rated it as important while GPE teachers described that content area as neither important nor unimportant.

In addition to the differences, the similarities between groups are noted. One content area that compared as similar was peer teaching techniques. In this content area both groups agreed that it was neither important nor unimportant. Another content area that was agreed on was teaching and instructional strategies. Both APE and GPE teachers felt that it was a very important content area.

DISCUSSION

The purpose of this study was to compare the perceived professional development needs of APE and GPE teachers. This study identified the importance of each professional development area by analyzing data compiled from ranking and rating scales.

It is important to identify relevant APE professional development areas for several reasons. Appropriate professional development areas can be emphasized accordingly in preservice and inservice professional development programs. Also it is important to identify which professional development areas are more important for the two types of teachers (GPE & APE) who provide physical education services to students with disabilities.

Results indicate that all three groups of the teachers in this study felt they need professional development most in the areas of knowledge of disabilities and teaching and instructional strategies. The two professional development areas that scored the lowest were peer teaching techniques and technology and physical activity. Peer teaching techniques were most likely ranked very low because teachers may have felt that a paraprofessional should be in the class helping students with disabilities. Technology and physical activity was probably ranked low because many teachers may still use traditional methods of teaching and do not know the capabilities and utility of available technologies in physical education. It is also likely that they do not know how technology can contribute the success of their class.

The ranking and rating scales yielded similar results for perceived professional development needs. Professional development areas received dissimilar scores when comparing the APE to GPE teachers. When teachers ranked the professional development areas, the largest mean differences were in inclusion techniques (APE = 6, GPE = 4), knowledge of disabilities (APE = 5, GPE = 3), and consultation and collaboration (APE = 8, GPE = 6). Inclusion techniques were most likely ranked differently because GPE teachers only see students with disabilities in an inclusive setting while APE teachers ranked inclusion techniques low because they see and teach students with disabilities in many different settings.

When comparing the three groups on the rating scale the largest difference between APE and GPE teachers was in the content area of knowledge of disabilities. This is probably because APE teachers work with many different students with disabilities and those teachers also took courses and know the disability content thoroughly. GPE teachers described this area as very important while APE teachers only rated it as important. Behavior management was another area with large differences between groups. Adapted physical education teachers rated it as important while GPE teachers described that content area as neither important nor unimportant. This was probably because GPE teachers do not have the same behavior management issues as APE teachers. Adapted physical education teachers often have students with behavior issues disabilities that cause those students to act out in ways that require special attention and/or training.

A study by Chen, Lau, and Jin (2006) found that preservice teachers felt unprepared and lacked confidence when working in an inclusive setting. Preservice GPE

teachers are therefore likely to feel that inclusion techniques are important and rank that area higher than the APE teachers.

The findings in the study regarding GPE teachers' professional development needs with inclusion techniques ranking the highest is consistent with the research findings from Hersman and Hodge (2010). The results from that study revealed that teachers needed additional professional training, knowledge, and exposure to better work with students who have disabilities.

The findings in this study have significant implications regarding various aspects of future teacher preparation programs and inservice education. While each professional development area is important and should be addressed, data indicate that some areas should be emphasized more than others. When planning for solely APE teachers, the focus for professional development should be more on behavior management and teaching and instructional strategies. For GPE teachers, the focus of inservice professional development should be more on inclusion techniques, knowledge of disabilities, and teaching and instructional strategies.

The average of the rating and ranking scales from all of the APE and GPE teachers were about the same for the two most important professional development areas. These areas were knowledge of disabilities and teaching and instructional strategies. These two areas provide a solid foundational core for preparing any teacher to work with students with disabilities.

There were some limitations encountered during the present study. One of these limitations was the number of participants. At the beginning of the study, the cover letter and survey were emailed to each state executive director of all AAHPERD affiliates,

requesting them to forward the survey to all APE and GPE teachers in their state. This study included no system of verification for whether or not a state director actually sent the information to the teachers in each state. Because of this, the actual return rate of the survey could not be calculated. Another limitation was that there was no way to determine if the participants responded to the survey truthfully and thoughtfully. The final limitation was that the amount of teaching experience varied from teacher to teacher and was not controlled for as variable in this study.

Future research should be conducted to investigate why APE and GPE teachers rate and rank each professional development area the way they did. This could be done by using more open-ended questions or interviews. Further, it would be interesting to determine more thoroughly any differences in professional development needs between pre-K, elementary, middle, and high school physical education teachers. In addition, future research should focus on differences between states and/or regions of the U.S. It is possible that states with APE teacher certification requirements may have teachers with different professional development needs than those states without certification requirements. It would also be interesting to find out if teaching physical education to students with disabilities in different settings would affect teacher's perceived professional development needs. Finally, future research should examine professional development interests and needs between teachers at different grade levels.

CONCLUSION

Professional development for APE and GPE teachers is essential as it ensures that students with disabilities have the opportunity for the best education possible from highly qualified staff. It is clear from the results of this study that each of the 12 professional development areas examined are important to both APE and GPE teachers.

While all 12 areas were important, content areas that need to be emphasized for APE and GPE teachers are knowledge of disabilities and teaching and instructional strategies. Specifically, behavior management and teaching and instructional strategies need to be focused when discussing content areas with only APE teachers. Professional development areas for just GPE teachers should be focused on specifically knowledge of disabilities, inclusion techniques, and teaching and instructional strategies.

Professional development programs can assist GPE teachers by enhancing their inclusion techniques. Many GPE teachers who are teaching inclusive classes need more knowledge and skill in this area. This can be addressed by focusing the professional development on the techniques that can make inclusion work more successfully such as utilizing support staff, communication for everyone, and differentiated instruction.

REFERENCES

Block, M. (2006). *A teacher's guide to including students with disabilities in general physical education (3rd Ed.)*. Baltimore, MD: Brookes Publishing.

Chen, S., Lau, K., & Jin, M. (2006). Students' attitudes toward including students with disabilities in regular p.e. settings in Hong Kong and Taiwan. *Asian Journal of Exercise & Sports Science, 3*(1), 35-39.

Education for All Handicapped Children Act of 1975. U.S. (PL 94-142, NOV. 29, 1975), *United States Statutes at Large, 89,* 773-796.

Hersman, B., & Hodge, S. (2010). High school physical educators' beliefs about teaching differently abled students in an urban public school district. *Education and Urban Society, 42*(6), 730-757.

Hardin, B. (2005). Physical education teachers' reflections on preparation for inclusion. *Physical Educator, 62*(1), 44-56.

Individuals with Disabilities Education Act Amendments of 2004 (IDEA) (PL 108-446), 20 U.S.C. 1400 (2004).

Kelly, L. (2006) *Adapted physical education national standards (2nd ed.).* Champaign, IL: Human Kinetics.

Lieberman, L., & Houston-Wilson, C. (2009). *Strategies for inclusion: A handbook for physical educators (2nd ed.).* Champaign, IL: Human Kinetics.

APPENDIX A

ONLINE SURVEY

PROFESSIONAL DEVELOPMENT NEEDS OF GENERAL AND ADAPTED PHYSICAL EDUCATION TEACHERS

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Professional Development Needs of General and Adapted Physical Education Teachers

Thank you for participating in this brief survey. The purpose of this project is to determine areas of professional development that would be most beneficial for physical education teachers who work with students with disabilities. Your participation should take less than 10 minutes. The information you send is anonymous and only group information will be published or presented. Your participation is voluntary and you may choose not to answer any or all of the items on this survey without penalty. Your voluntary completion of this survey is your implied consent for your data to be included in this study.

Your participation in this survey is greatly appreciated and valued. If you have any questions about this research project, please contact Scott Rosenfeld at (608) 785-8740, or by email, rosenfel.scot@uwlax.edu.

Teacher Information

Are you currently a full time teacher?

- Yes
- No

Years of teaching experience:

What percent full-time equivalent (FTE) do you currently teach General Physical Education?

What percent full-time equivalent (FTE) do you currently teach Adapted Physical Education?

Please indicate the percentage of time you teach at the following levels:

Preschool
Elementary
Middle
High School

In what state do you currently teach?

Describe your school's location:

Number of students in your school district:

- 1000 or fewer
- 1001 to 2000
- 2001 to 3000
- 3001 to 4000
- 4001 to 5000
- Greater than 5000

Your gender:

- Male
- Female

Your age:

0% 100%

Next >>

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Education

Highest level of education:

- Bachelors
- Masters
- Doctoral

Please indicate the number (if any) post degree credits earned. This includes credits towards another degree and/or credits for salary advancement/certification/etc.

Do you have APE Certification?

- Yes
- No

0% 100%

<< Go Back | Next >>

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Do you have National Certification in Adapted Physical Education (CAPE)?

- Yes
- No

0% 100%

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Ranking Your Perceived Professional Development Needs

Drag each of the following professional development content areas to the area on the right in order of importance to YOU PERSONALLY (what do you feel you need to best teach students with disabilities?). Moving your cursor over a content area will provide a definition.

Items	Drag items here (most important on top)
Inclusion Techniques	
Adapted Equipment	
Behavior Management Strategies	
Knowledge of Disabilities	
IEP Process	
Peer Teaching Techniques	
Working with Paraprofessionals	
Activity/Game/Content Modifications	
Teaching and Instructional Strategies	
Assessment	
Technology and Physical Activity	
Consultation and Collaboration	

0% 100%

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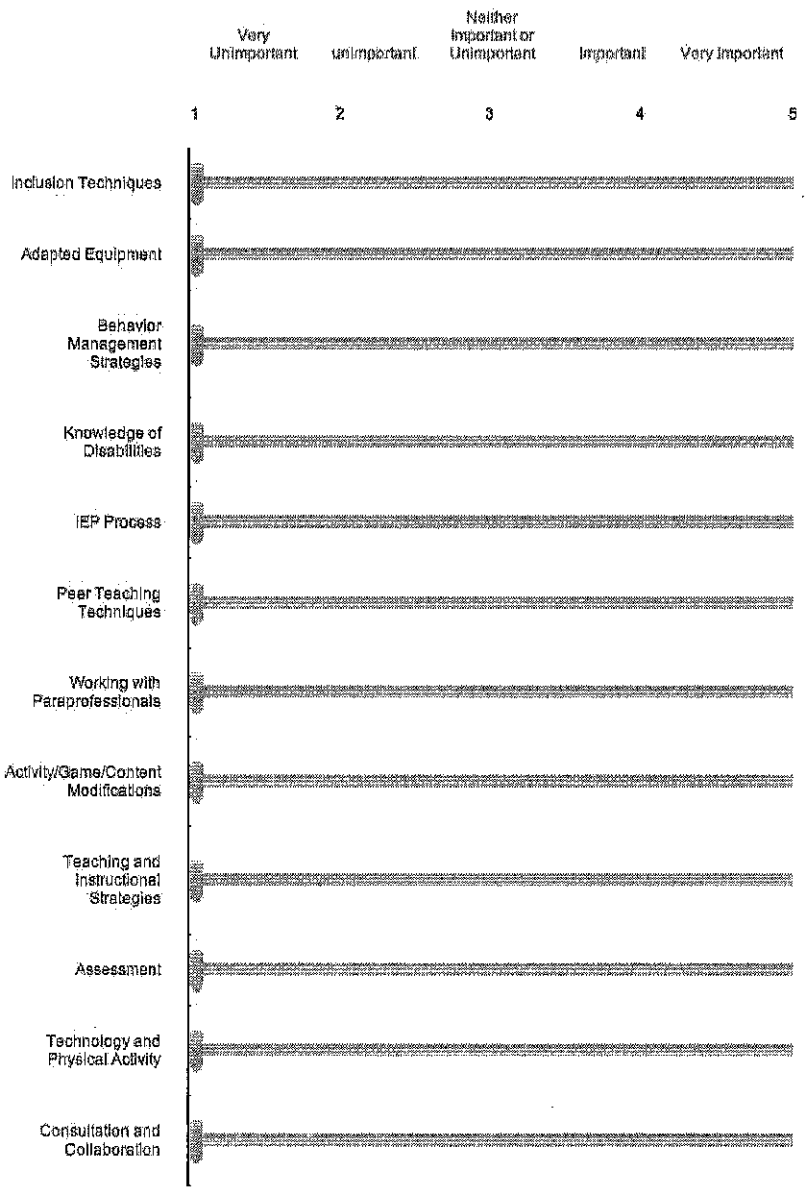
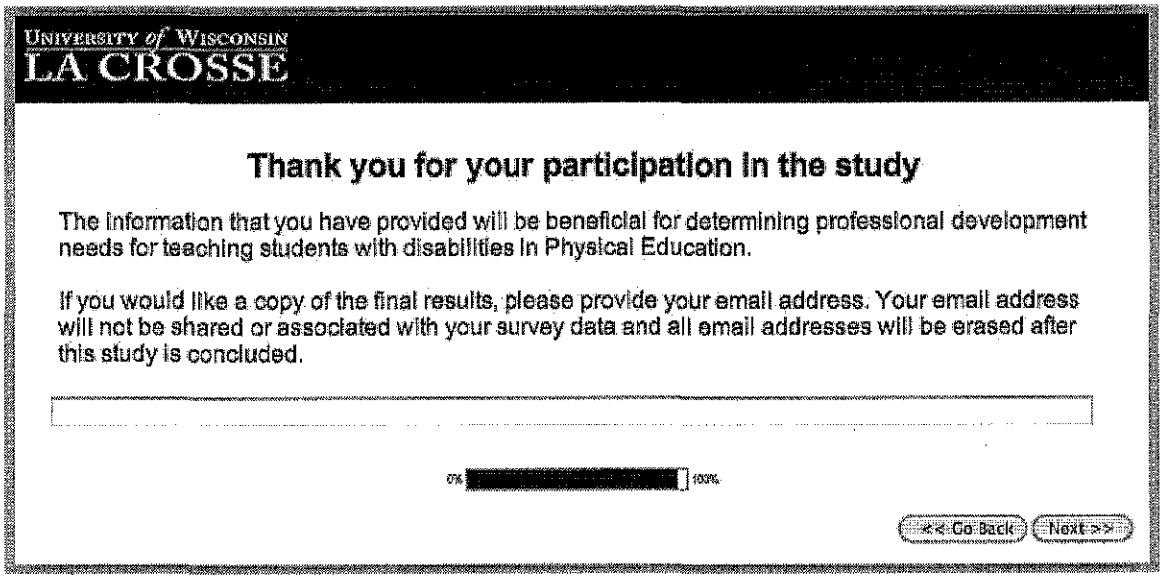
Please move the sliders below to indicate how important each content area is to you personally in order to provide high quality physical education services for students with disabilities. Moving your cursor over a content area will provide a definition.



Other suggestions - List other content areas you feel are important for your professional development regarding teaching students with disabilities:

0% 100%

<< Go Back | Next >>


UNIVERSITY of WISCONSIN
LA CROSSE
Thank you for your participation in the study
The information that you have provided will be beneficial for determining professional development needs for teaching students with disabilities in Physical Education.
If you would like a copy of the final results, please provide your email address. Your email address will not be shared or associated with your survey data and all email addresses will be erased after this study is concluded.
0%
100%
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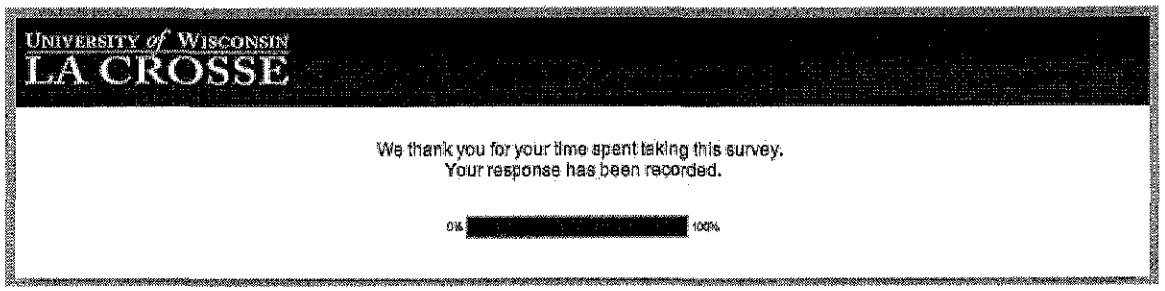
Next >>


UNIVERSITY of WISCONSIN
LA CROSSE
We thank you for your time spent taking this survey.
Your response has been recorded.
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APPENDIX B

COVER LETTERS

To Educational Community Members,

My name is Scott Rosenfeld and I am a graduate student studying Adapted Physical Education at the University of Wisconsin-La Crosse. I am currently doing my thesis on perceived professional development needs regarding working with students who have disabilities. This study will provide useful information to help general and adapted physical education teachers provide better physical education services to these students. It will allow us to determine physical education teachers' professional needs regarding working with students with disabilities.

I would like to distribute this short online survey to general and adapted physical education teachers across the country. I respectfully request that you distribute this cover letter that is copied at the bottom as an email message and also as an attachment to your distribution lists for your state. I, along with my thesis committee team, would greatly appreciate your help.

If you have any questions about this research project, please contact me at (608) 785-8740, or by email, rosenfel.scot@uwlax.edu.

Thank You,
Scott Rosenfeld

Professional Development Needs of General and Adapted Physical Education Teachers

Dear Physical Education Teacher:

Thanks to those who have already completed this survey. If you have not attempted to do this survey please consider completing this short, 10 minute survey.

I am a graduate student studying adapted physical education at the University of Wisconsin-La Crosse. I am conducting a thesis project regarding the professional development needs of teachers who work with students who have disabilities. The title of this study is *Professional development needs of general and adapted physical education teachers.* The purpose of this study is to determine areas of professional development that would be most beneficial for physical education teachers who work with students with disabilities.

This confidential survey should take less than 10 minutes to complete. Your participation is voluntary and you may refuse to participate without penalty whatsoever. If you choose to participate, you do not have to answer questions if they make you feel uncomfortable. Your name will not be requested in this survey. The survey will be deleted and destroyed after the project is completed.

Simply go to this website:
https://uwlacrosse.qualtrics.com/SE/?SID=SV_6xogU8T1Rx97Fhq

If you would like a copy of the final results provide your email address at the end of the survey and I will send them to you. Your email will not be associated with your name and will be destroyed at the end of the project.

Your voluntary completion and submitting the survey is your informed consent. Your participation in this survey is greatly appreciated and valued. If you have any questions about this research project, please contact me, at (608) 785-8740, or by email, rosenfel.scot@uwlax.edu.

Sincerely,
Scott Rosenfeld
Graduate Student
University of Wisconsin-La Crosse

Manny Felix, Ph.D., Professor
(608) 785-8691
Felix.emma@uwlax.edu

APPENDIX C

DEFINITIONS FOR PROFESSIONAL DEVELOPMENT CONTENT AREAS

Key:

A. Inclusion Techniques: Refers to the strategies used or techniques that a general/adapted physical education teacher can include a student with a disability in a general physical education class so that all students are safe, active, and successful in meeting educational objectives in physical education.

B. Adapted Equipment: Refers to the knowledge and skill in using different types of modified equipment that can assist a student with a disability to participate safely and meaningfully in a physical education class to meet educational objectives.

C. Behavior Management Strategies: Refers to the use of behavior techniques that can facilitate on-task behavior of a student with a disability.

D. Knowledge of Disabilities: Refers to understanding of disabilities and their impact upon movement, development, cognitive understanding, and physical activity.

E. IEP Process: Refers to the ability to write measurable annual IEP annual goals and other required information on an individualized educational program for a student who receives special education services. This also includes how to present this information to the parents and other professionals during IEP meetings.

F. Peer Teaching Techniques: Refers to the ability to organize and implement an education delivery system whereby nondisabled peers assist students with disabilities in the physical education classroom to participate successfully.

G. Working with Paraprofessionals: Refers to the ability to adequately prepare paraprofessionals to assist students with disabilities in participating successfully in an adapted or general physical education class.

H. Activity/Game/Content Modifications: Refers to the ability to modify instructional activities in a physical education class so that students with disabilities can participate successfully.

I. Teaching and Instructional Strategies: Refers to physical education teaching behaviors that are used to effectively organize and motivate students with disabilities to meaningfully participate and achieve educational outcomes.

J. Assessment: Refers to the knowledge of and the ability to use different assessment tools (i.e. Peabody Developmental Motor Skills-2, Test of Gross Motor Development-2, Bruininks-Oseretsky Test of Motor Proficiency-2, The Brockport Physical Fitness Test, and the Fitnessgram) and other strategies (e.g. use of rubrics), to collect data for making educational decisions.

K. Technology and Physical Activity: Refers to the ability to incorporate technology into the physical education class so that students with disabilities achieve educational objectives. Examples include the use of Smartboard, pedometers, heart rate monitors, Wii, Xbox Kinect, etc.

L. Consultation and Collaboration: Refers to the ability to interact in a professional manner with other education professionals (PE/APE teachers, special education teachers, PT's, OT's, paraprofessionals, principals, and parents) for the purpose of ensuring the best education for students with disabilities.

APPENDIX D

REVIEW OF RELATED LITERATURE

REVIEW OF RELATED LITERATURE

Introduction

Physical education is not only an educational service for nondisabled students, but also for students with disabilities. Students with disabilities may receive physical education in a one on one setting with a teacher, a class of multiple students with disabilities, and/or in an inclusive class. Inclusion is a common practice in physical education. The majority of students with a disability are taught in a general physical education class. More than 93% of students with disabilities are taught in public schools (Lieberman & Houston-Wilson, 2009).

The Education for All Handicapped Children Act was established to help provide services for students with disabilities. It is now renamed and updated to the Individuals with Disabilities Education Act (IDEA, 2004). This ensures that students with disabilities are provided with a free appropriate public education. This includes having a student with a disability in the least restricted environment (LRE) possible that the student can benefit the most from. The LRE whenever possible is to receive the same education as students without disabilities (IDEA, 2004). Although adapted physical education (APE) teachers are allowed to select from a wide range of LRE's, they must choose the most appropriate educational placement. The initial goal for a child with a disability is to be educated to the maximum extent possible in the general physical education class and be successful. This statement coincides with IDEA. According to

IDEA, schools are required to provide education in the most appropriate LRE for each individual student (IDEA, 2004).

If a student with a disability is placed in general physical education, then there would be opportunities for receiving physical, psychological, and cognitive benefits for that student, and also including those student without disabilities as well. Furthermore, students would become more comfortable with each other and have more opportunities to work on their social skills (Block, 2006). Thus, from an instructional perspective, there are reasons why inclusion practices are valuable in supporting educational and noneducational objectives for all students (Lieberman & Houston-Wilson, 2009). In addition, from an administrative perspective, inclusion practices are also integral for significant educational reform in our U.S. society (Block, 2006).

Although many factors can influence the effectiveness of inclusive outcomes such as student and teachers' attitudes, availability of modified equipment, classroom support, attitudes of the community, and socioeconomic status, this study will focus on the professional development of teachers who ultimately and directly implement inclusive practices. Positive inclusive outcomes are only evident for students if the teacher is both highly effective and well prepared. Since the majority of the states in the U.S. do not have a certification or endorsement specifying who is highly qualified to teach APE, it is common that many general physical education specialists are teaching APE in inclusive and more restrictive educational placements. General physical education teachers usually have taken very few classes in APE during their teacher preparation and may feel uncomfortable, unprepared, and possibly lack the confidence for working with students with disabilities. Many teachers may lack the proper professional preparation to make

inclusion successful (Block, 2006). They also may not have the knowledge that they need to allow the student with the disability to be as successful in an inclusion class (Hardin, 2005).

It would seem plausible that a physical education teacher with significant APE professional development would be more effective than a general physical education specialist with little or no APE professional development. Licensed and practicing APE teachers have received training to work successfully with students with disabilities. However, even with the best training there are still many competencies that a professional teacher can learn and improve (Kudláček, Ješina, Štěrbová, & Sherrill, 2008).

Since both general and APE teachers work with students with disabilities in the inclusive classroom, ongoing professional development is necessary to maximize positive student outcomes. For any teacher, there is much knowledge and many skills that they could improve. Examples of areas of professional development that teachers can further enhance could be inclusion techniques, adapted equipment, behavior management strategies, knowledge of disabilities, Individualized Education Program (IEP) process, peer teaching techniques, and working with paraprofessionals. Other areas include activity/game modifications, teaching and instructional strategies, assessment, consultation and collaboration, and technology.

Determining what general and adapted physical education teachers value and need for their professional development would be very beneficial for several reasons. The information obtained would allow school districts, universities, and professional development conferences to know what competencies are most needed to prepare teachers to work with students with disabilities. It would allow school districts to focus

on the most important information needed for in-service professional development. Also, results may allow districts and professionals to see if general and APE teachers have the same views about working with students with disabilities.

Adapted Physical Education Teacher Roles

APE teachers have different roles and responsibilities than a general physical education teacher. Researchers have identified roles responsibilities of APE teachers. Akuffo & Hodge (2008) examined the roles and responsibilities of APE teachers. This study included 6 experienced APE teachers who have taught students with disabilities in the Columbus Public Schools district in Ohio. Data was collected through demographic data sheets, two audio-taped interviews, on-site observations, and field notes from observations (Akuffo & Hodge, 2008).

The most valuable information derived from this research project centered around three themes. First, APE teachers viewed the primary focus of teaching would be strictly with teaching students with disabilities on their specific needs of their IEP goals. Second, APE teachers identified other important responsibilities such as assessing, developing IEP objectives, planning lessons, providing instructions, managing classes, ensuring safety, and communication. Lastly, the authors concluded that APE teachers are more self reliant than other teachers due to the nature of their work (Akuffo & Hodge, 2008).

In order for students to flourish, general and adapted physical education teachers must be well prepared and trained to work with students with disabilities. Kudláček, Ješina, Štěrbová, & Sherrill (2008) conducted a study to determine the roles of teachers in APE in different schools. Determining the most important roles and responsibilities of APE teachers would be beneficial to help prepare future professionals for these roles.

This would allow the districts and universities to obtain information to better prepare their teachers and improve their skills as general and adapted physical educators.

The study included in-depth interviews, demographic data, and recording interview notes. Participants included 6 females and 2 males with at least two years of experience and are a specialist in APE. The participants underwent a 30 minute semistructured interview in which the interviewer took notes and gave the notes back to the participants in order to make corrections or additions to what they had already stated.

From the interview and demographic data, the authors were able to analyze the results. An average day for an APE teacher included traveling from school to school. Teachers who taught in larger schools tended to have larger caseloads. This sometimes caused problems with knowing the student for IEP's and not having enough time to attend IEP meetings. The participants stated that there were positive and negative aspects when working with general physical education teachers. With more teaching experience, then the relationship between the general and the adapted physical education teacher became more positive. They also stated that elementary school teachers were more commonly receptive for inclusion as compared to secondary physical education teachers.

In this study, participants also indicated that they would like to learn more about activity modifications and disability awareness. The participants would also like to have more training in parental involvement, access to adapted equipment, and more inclusion techniques. Lastly, participants would like to improve practicum experiences with people with disabilities, consultation and people skills, assessment and transition, and activity modifications (Kudláček, Ješina, Štěrbová, & Sherrill, 2008).

APE is more than just teaching skills. An APE teacher must communicate well with students, teachers, and parents to allow the most benefits to occur. Lytle and Hutchinson (2004) designed a study to describe the experiences and roles of communication and consultation among APE teachers.

The way the authors got the best information for finding out what teachers experiences are and how they felt about consultation was through a qualitative investigation. The authors conducted the study by using in-depth interviews, interview notes, demographic data sheets, and a one day field observation.

The authors received information from 6 participants. The participants were 4 females and 2 males that were from different settings and different amounts of experience. The authors did this because they wanted to have maximum variation so it was not a biased study. The criteria the participants needed to meet were that they are a current APE specialist in California, they were teaching at least 50% APE, and had a minimum of 10% instructional caseload.

The information that was gathered from this study was that consultation and communication amongst students, teachers, and parents are an everyday occurrence. The authors stated that teachers felt that this can occur in many different forms from face to face meetings to a quick question passing by each other. This study found that the roles of an APE teacher concerning consultation can be categorized into advocate, educator, courier (bringing in outside information to help the student), resource coordinator, and supporter/helper (Lytle & Hutchinson, 2004).

The results of this research study have important implications that can help with future research. It allows future researchers to know that they should include

consultation and communication as part of a professional development training program. Consultation is a daily activity that happens when you are an APE teacher and should not be ignored when discussing needs for professional development.

In physical education classes today, many students with disabilities are educated in the same classes as their nondisabled peers. In order for students to be successful in the inclusion class the teacher needs to know how to provide differentiated information.

Jansma and Surburg (1995) conducted a study to find out what teachers in higher education need to know prior to working with students with disabilities. A team of five people made up the Internal Review Committee that initially developed APE inclusion teaching competencies. An External Review Committee that were in the field of APE, provided feedback to the Internal Review Committee. Based on the feedback a final copy was completed.

Through this process 20 competencies were determined for APE. The emphasis of the competencies addressed knowledge, content, evaluation, professional growth, funding, consulting, in-service program content, dissemination, use of research finds, expertise in cognate areas, and behavior management (Jansma & Surburg, 1995).

These competencies serve as guidelines to teach current and future professionals so they can become more highly effective in teaching students with disabilities. By knowing APE roles and responsibilities, relevant professional development experiences can be considered.

In another study, Kelly and Gansneder (1998) determined what teachers would want to learn more about in order to become a better professional. A survey was sent to 575 teachers from all 50 states. The lengthy 10 page survey consisted of 249 questions.

There were 20 questions relating to education, 51 questions relating to job demographics, 149 questions relating to roles, and 29 questions relating to training.

Data indicated that teachers desired planning and implementation the most. The actual teaching was the most desired in every subgroup followed by motor development. The results also showed eligibility, placement, IEP, and in instruction and if they were teaching directly or indirectly (Kelly & Gansneder, 1998).

The results from this study can provide support for updating standards to better suit the needs of the teachers that are working with students with and without disabilities. The findings can provide the information needed for professional development such as planning and implementation of teaching.

Teacher Preparation Programs and Teacher Confidence

Current and future physical education teachers go through many classes and training programs to prepare them for their teacher roles. One question of interest is whether or not their training and professional development experiences are adequate enough to allow them to feel confident in all conditions? It seems to remain a question if students and teachers are prepared enough to feel confident with working with students who have disabilities. One study was conducted to determine attitudes of teacher candidates toward inclusion (Chen, Lau, & Jin, 2006).

In this study, participants included teacher candidates from Hong Kong and Taiwan in their final year of their teaching program. Each participant completed a 15 item questionnaire with five open ended questions.

The authors found that the teacher candidates support the idea of inclusion, but felt that it would not work in reality. Students from Hong Kong did not feel very

confident with teaching students with disabilities. The authors found that the teacher candidates felt that they needed more academic preparation time for inclusion since they did not feel very confident with working with students who have disabilities. Interestingly, teacher candidates who had more training with working with students with disabilities had more positive attitudes and were more confident with inclusion. Overall, the teacher candidates perceived themselves as unprepared and did not have a lot of confidence with working in an inclusion setting.

It is reasonable to believe that if teacher candidates are not confident with inclusion, then lack of confidence will be present as a new teacher. For new teachers it may be difficult to cope with working with students who have disabilities. In one study Hardin (2005), authors determined teachers perceptions on how well their teacher preparation programs prepared them for working with students with disabilities.

Using interview and observations methodology, this study was designed to determine how teachers felt working with students who have disabilities in an inclusive setting. The five beginner teachers, ranging from 2-5 years of experience, dealt with inclusion every day. Data came from a 90 minute semi-structured interview, field observations of 3 different inclusive classes, and Q Sort interviews. The Q-Sort interview allowed the author to gather a ranking system to see what was most valuable.

Results showed that actual hands on teaching is the most important learning tool because you can gain so much from actual work. Teaching experience helps with confidence tremendously and cannot be substituted. Also, learning from colleagues past experiences and knowledge is extremely important since they may have gone through

many different experiences. And lastly, the introductory APE course provided information that they could use in the physical education class.

From these studies, ideas of the best ways to prepare our future physical education teachers to teach students with disabilities are apparent. Overall, increase increasing the amount of classes and practical experiences in APE can improve their confidence.

Professional Development in Adapted Physical Education

It has become apparent that teachers and future professionals would like to have more knowledge and feel more comfortable with working with students who have disabilities. Studies have been conducted to see if teachers would like to have more professional development in APE. Hersman and Hodge, (2010) revealed that some teachers felt that it was unrealistic to have students who have disabilities in a general physical education class. The most valuable information from this study, however was that the teachers felt they needed additional professional training, knowledge, and exposure for working with students who have disabilities. These results support the need for more professional development in APE for teachers who work with students with disabilities.

In another study, Lieberman, Houston-Wilson, and Kozub, (2002) investigated why some teachers feel they do not want to include students with disabilities into their physical education class.

This study included 52 males and 96 females who had at least one year of teaching experience and had a student with a visual impairment in their physical education class. Using a questionnaire, the authors determined barriers to include students with disabilities in physical education classes.

The results of this study showed various barriers that teachers face when trying to have full inclusion with students with visual impairments such as lack of equipment, programming curriculum, and time in schedule. One significant barrier, however that teachers identified was that the professional development did not fulfill their needs and provide knowledge that would make them feel comfortable teaching these students. These results suggest that professional development and training programs need to be implemented in the areas of specific disabilities such as cerebral palsy, autism, behavioral disorders, and others.

Another aspect of physical education that should be taught in physical education is social skill functioning. All students should learn how to communicate successfully. Since many children with disabilities have trouble with social skills, the teacher needs to foster an environment to teach and reinforce positive social skills. In one study, an author conducted a research study to determine the perceptions of teachers on teaching students with disabilities social skills (Samalot-Rivera & Porretta, 2009). The authors specifically wanted to see if teachers felt they were adequately trained and prepared to work with students who have disabilities.

Participants were 225 physical educators that were certified in APE and currently teaching students with disabilities. A questionnaire that consisted of three parts. The first part was to determine teachers' perceptions and beliefs of teaching social skills in physical education. The second part of the questionnaire was to determine what skills are important to teach. The third part was to see what the professional preparation and teaching experience they have had.

Overall, it was determined that even the teachers that had significant teaching experience wanted to have more professional development with working with students who have disabilities. Participants indicated that they would benefit from additional preparation in the teaching of social skills and working with students who have disabilities (Samalot-Rivera & Porretta, 2009). These results demonstrate the importance of continued professional development for teachers who already have significant teaching experience with students who have disabilities. That is, it is important to remember that professional development should not stop after completion of an initial teacher preparation program.

Summary and Conclusions

All of these studies dealt with teachers working with students who have disabilities. The studies discussed what general and adapted physical education teachers do, how they felt about working with students who have disabilities, and if current and future teachers need and want more professional development in APE. There were studies conducted with surveys, a review board, and studies that used interviews.

One research study supported that competencies regarding inclusion needs to be developed for higher education teacher preparation programs. Competencies addressing knowledge, content, evaluation, professional growth, funding, consulting, in-service program content, dissemination, use of research finds, expertise in cognate areas, and behavior management are warranted (Jansma & Surburg, 1995).

Other studies were conducted to see how to make teachers better once they are teaching in schools and what they wish they knew more about. One study showed that planning and implementation were the most important areas of professional development

(Kelly & Gansneder, 1998). Other studies show some limitations of current physical education teacher preparation programs. Having adequate teaching experiences, learning through other teachers, and taking enough course work are all important to develop the best teacher candidates when working with students with disabilities (Hardin, 2005). In another research study, participants indicated a need for more practicum experience with students who have disabilities, consultation and people skills, assessment and transition, and activity modification prior to going into the physical education world (Kudláček, Ješina, Štěrbová, & Sherrill, 2008). These studies suggest what is important for standards and what teachers would like to learn more.

Other research studies show that current and future physical education teachers do not feel confident working with students who have disabilities alone or in an inclusive setting. APE classes can use more of these classes to include more hands on experience (Hardin, 2005). In one study, it was found that teachers though inclusion is idealistic but not practically feasible in real life. This indicates that many do not feel comfortable or confident enough to include students who have mild to severe disabilities into a general physical education class (Chen, Lau, & Jin, 2006). This suggests that higher education programs should highly consider the methods used to prepare students to feel confident in teaching students with disabilities.

Continued professional development and training is necessary for currently practicing physical education teachers. Studies have demonstrated needs for more professional development in inclusion practices. Also professional development should include content related to specific disabilities such as how to include students with visual

impairments into the general physical education class because they are not prepared or trained enough (Lieberman, Houston-Wilson, & Kozub, 2002).

There are many research study questions that arise from these studies such as: What would be the most beneficial teacher preparation programs for physical education teachers in an inclusion class? What can districts present in professional development workshops to improve the skills of physical education teachers when working with students who have disabilities? What training programs would benefit APE teachers the most? It is important to try to find answers for these questions because it would allow teachers to become better professionals and overall make programs better for the students with and without disabilities.

REFERENCES

Akuffo, P., & Hodge, S. (2008). Roles and responsibilities of adapted physical education teachers in an urban school district. *Education and Urban Society, 40*(2), 243-268.

Block, M. (2006). *A teacher's guide to including students with disabilities in general physical education (3rd Ed.)*. Baltimore, MD: Brookes Publishing.

Chen, S., Lau, K., & Jin, M. (2006). Students' attitudes toward including students with disabilities in regular p.e. settings in Hong Kong and Taiwan. *Asian Journal of Exercise & Sports Science, 3*(1), 35-39.

Hardin, B. (2005). Physical education teachers' reflections on preparation for inclusion. *Physical Educator, 62*(1), 44-56.

Hersman, B., & Hodge, S. (2010). High school physical educators' beliefs about teaching differently abled students in an urban public school district. *Education and Urban Society, 42*(6), 730-757.

Individuals with Disabilities Education Act Amendments of 2004 (IDEA) (PL 108-446), 20 U.S.C. 1400 (2004).

Jansma, P., & Surburg, P. (1995). Ph.d. competency guidelines and adapted physical education professional preparation in the United States. *Adapted Physical Activity Quarterly, 12*(4), 307-322.

Kelly, L., & Gansneder, B. (1998). Preparation and job demographics of adapted physical educators in the United States. *Adapted Physical Activity Quarterly, 15*(2), 141-154.

Kudláček, M., Ješina, O., Štěrbová, D., & Sherrill, C. (2008). The nature of work and roles of public school adapted physical educators in the United States. *European Journal of Adapted Physical Activity, 1*(2), 45-55.

Lieberman, L., & Houston-Wilson, C. (2009). *Strategies for inclusion: A handbook for physical educators (2nd ed.)*. Champaign, IL: Human Kinetics.

Lieberman, L., Houston-Wilson, C., & Kozub, F. (2002). Perceived barriers to including students with visual impairments in general physical education. *Adapted Physical Activity Quarterly, 19*(3), 364-377.

Lytle, R., & Hutchinson, G. (2004). Adapted physical educators: The multiple roles of consultants. *Adapted Physical Activity Quarterly, 21*(1), 34-49.

Samalot-Rivera, A., & Porretta, D. (2009). Perceptions and practices of adapted physical educators on the teaching of social skills. *Adapted Physical Activity Quarterly, 26*(2), 172-186.