

Overcoming Adapted Physical Education Barriers through Collaboration among Special Educators and Administrators

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Abstract

Specially designed physical education (PE), also known as adapted PE, is frequently provided by an adapted physical educator. Adapted physical educators are unique, as they need knowledge about both PE and special education curricula (Kwon & Block, 2014). However, students with disabilities are not provided appropriate PE services. The Individuals with Disabilities Education Act (IDEA, U.S.C. § 300.108, 2004) requires students with disabilities to have access to specially designed PE to meet their unique needs as determined appropriate by the individualized education program (IEP) team. However, it has been well documented that many barriers prevent effective adapted PE service delivery to students with disabilities (Government Accountability Office [GAO], 2010). Some barriers are associated with local special education administrators and special educators. The purpose of this article is to highlight the existing barriers for students with disabilities and offer possible solutions.

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Introduction

Specially designed physical education (PE), also known as adapted PE, is frequently provided by an adapted physical educator. Adapted physical educators are unique compared to general PE teachers, as they need knowledge about both general PE curricula (e.g., sport skills, locomotor skills) and skills associated with teaching students with disabilities (e.g., game adaptations, assessment; Kwon & Block, 2014). Although adapted PE teachers are specially prepared to teach PE to students with disabilities, state regulations differ greatly on who can deliver adapted PE services. Data from the Centers for Disease Control (CDC, 2015) on the status of PE within the United States (U.S.) reported that various direct and related service personnel taught PE to students with disabilities. Typically it was taught by general physical educators (46%) or by adapted physical educators (44%). Adapted PE was also taught by physical or occupational therapists (26%), paraprofessionals (17%), and by special educators (14%; Lee, Burgeson, Fulton, & Spain, 2007).

The Individuals with Disabilities Education Act (IDEA, 2004) stipulates that if PE is provided to students without disabilities it must be provided for students with disabilities; when appropriate. Further, IDEA requires that PE is adapted to meet their unique needs if determined appropriate by the individualized education program (IEP) team. In addition, Section 504 of the Rehabilitation Act (1973) stipulates that students with disabilities cannot be denied educational services (e.g., PE) on the basis of their disability. Although federal law requires that students receive PE, specially designed if needed, there are various barriers, which may negatively impact PE service delivery to students with disabilities. Examples of barriers that will be addressed in this article include adapted PE teachers not being invited to IEP meetings, a lack of collaboration between PE teachers and special educators, and a lack of support from school administrators (Columna, Lieberman, Lytle, & Arndt, 2014; Government Accountability Office [GAO], 2010; Stephens, Silliman-French, French, & Kinnison, 2011).

Gray (2016) examined school professionals' (e.g., school administrators, special educators) knowledge of PE for students with disabilities. Gray reported that special educators and school administrators, compared to PE teachers and adapted PE teachers, had a significantly lower understanding of PE content standards, and how to adapt PE equipment and instruction. Furthermore, special educators had an especially low understanding of the content knowledge related to PE in general. For example, 25% of the special educators in this investigation did not know if PE for students with disabilities was mandated by law (Gray). These findings imply that school administrators and special educators apparent lack of knowledge on PE for students with disabilities may present a significant barrier to effective adapted PE service delivery. Additionally, it is essential that they reach out to experts in the field (i.e., adapted PE teachers) and find other resources (e.g., training modules) to better understand the importance of appropriate PE services for students with disabilities; such as the social, cognitive, and physical benefits PE services provide.

Local special education administrators, who directly oversee special education programs within the school districts, provide crucial leadership for all special education programming (e.g., adapted PE) and are able to improve teaching and learning indirectly through their influence on staff motivation, commitment, and working conditions (Coelli & Green, 2012). It has been suggested that one of the most serious concerns in the field of adapted PE is the lack of guidance from local special education administrators (Tripp & Zhu, 2005). For instance, local special education administrators have reported to present numerous barriers to adapted PE services, which have various causes; such as local special education administrators having a lack of understanding of PE as a curriculum, a lack of understanding of the law and how it relates to PE, and a negative perspective of PE (GAO, 2010; Gray, 2016; Stephens et al., 2011; Trip & Zhu; Yell, Thomas, & Katsiyannis, 2012). Although it is well-documented that there are numerous barriers which may prevent quality adapted PE services, identifying barriers and solutions that school administrators pose to the services they supervise may help remediate many of these barriers (Coelli & Green, 2012).

Encouraging local special education administrators and special educators to develop PE competencies and collaborate with adapted PE teachers will help facilitate the delivery of quality PE programs for students with disabilities (Gray, 2016; Stephens et al., 2011). Therefore, the focus of the following information is to highlight: (a) the benefits of PE programs for students

with disabilities, (b) the major barriers that prevent effective delivery of PE programs to students with disabilities, (c) the solutions to raise awareness of the field of PE for students with disabilities, and (d) the promote collaboration among adapted PE teachers and others involved in the IEP process (e.g., school administrators, special educators).

Benefits of Physical Education for Students with Disabilities

For education professionals outside the field of PE to fully understand and appreciate the value of PE, it is important for them to understand the benefits attributed to PE, specifically, for students with disabilities. The benefits of a quality PE program and regular exercise, which is physical activity used to sustain or improve health, for students with disabilities are well-documented (Li et al., 2016; Rimmer, Rowland, & Yamaki, 2007; Wong et al., 2016). Physical activity benefits involve more than physiological areas, benefits include increased muscular strength and endurance, flexibility, cardiovascular fitness, and decreased obesity levels (Li et al. Rimmer et al.; Wong et al.). Through quality PE programs there is also increased academic performance and social participation; as well as benefits to an individual's psychological well-being (e.g., self-esteem, body image; Graham, Holt-Hale, & Parker, 2013; Rimmer et al.; Wong et al.). Specifically, researchers have reported that exercise can affect the physiology of the brain by increasing blood flow, oxygenation, and growth of nerve cells in the hippocampus (i.e., the location of learning and memory; Trudeau & Shephard, 2008). Consequently, these changes may also be associated with improved cognitive functions including information processing, attention, and storage and retrieval (Trudeau & Shephard). Furthermore, it has been suggested that infusing academic tasks into PE activities can be more effective than passive classroom activities because of the motivation factor (Mullender-Wijnsma, Hartman, de Greeff, Bosker, Doolaard, & Visscher, 2015).

Special Education Administrator Barriers

Educational Background

A vast majority of special education administration certification programs are offered in conjunction with a general education administration certification program (Boscardin, Weir, & Kusek, 2010). However, most of the general administration programs do not include sufficient coverage in special education, with some of the general administration programs only requiring one special education course. Alarming, many of the programs offer a special education course as an elective, rather than as a requirement (Hirth, & Valesky, 1991; Monteith, 2010).

PE programs for students with disabilities are often overlooked or only briefly mentioned in the special education overview courses offered within the general administration programs (Garrison-Wade, Sobel, & Fulmer 2007). For instance, Hays, Silliman-French, and Kinnison (2011) reported that of 33 required special education college course textbooks, 19 textbooks (57%) had no mention of PE for students with disabilities. Further, within most of the textbooks that did mention PE for students with disabilities, the majority did not properly cover the topic, with only one textbook explaining that PE was a part of the definition of special education in IDEA.

Understanding of the Law

Local special education administrators may not understand special education laws (e.g., IDEA, 2004) that are essential to provide effective PE services, nor legally complainant PE services to students with disabilities (Yell et al., 2012). Although access to PE is mandated by law for students with disabilities, school administrators appear to have little knowledge of how to effectively supervise and monitor PE programming for students with disabilities (Gray, 2016). In fact, it has been reported that there is a severe lack of special education administrator's guidance pertaining to adherence to federal legislation in relation to adapted PE (Tripp & Zhu, 2005). Garrison-Wade and colleagues (2007) reported that 40% of educational leadership graduate students believed they lacked knowledge of special education law and need additional training with regard to special education law. It is especially important that special education administrators understand how PE is part of this major education law, as IDEA (2004) specifically defines PE as

The development of (a) physical and motor fitness; (b) fundamental motor skills and patterns; and (c) skills in aquatics, dance, and individual and group games and sports (including intramural and lifetime sports); and includes special PE, adapted PE, movement education, and motor development PE services, specially designed if necessary, must be made available to every child with a disability receiving free appropriate public education If specially designed PE is prescribed in a child's IEP, the public agency responsible for the education of that child shall provide the services directly or make arrangements for those services to be provided through other public or private programs (IDEA, U.S.C. § 300.108, 2004).

Due to limited knowledge of special education law, many special education administrators may be unaware that physical educators should be involved in the IEP process and may assume the physical educator is not interested in being part of the IEP team (Ellen, Lieberman, & Daggett, 2006). Additionally, a lack of knowledge of special education law could affect special education administrators' knowledge about the application of the least restrictive environment concept to PE. There are many educational settings where students with disabilities are provided PE services within a general PE setting with little to no access to adapted PE services (GAO, 2010). This may mean that school districts are not providing appropriate PE services to students with disabilities along a least restrictive continuum. The lack of PE placement options available could negatively impact students' education and growth, as well as jeopardize a school's compliance with IDEA (2004).

Curriculum Experts

Thompson and O'Brien (2007) surveyed special education administrators and identified a lack of understanding of both special education instruction and assessment. Most often administrators, including local special education administrators, are promoted from teaching positions. However, a large number of teachers have a limited set of experience and knowledge of curriculums outside of their specialties (i.e., PE), as well as instructional leadership. This may especially be the case for their understanding of curriculums such as PE for which they may have had little to no formal education (Pickens & Dymond, 2014). Specifically, local special education administrators are uncertain whether they need to perform regular evaluations for PE for students with disabilities and whether PE eligibility standards and evaluative criteria even

exist (Stewart, 2010). Further, there is a lack of understanding regarding how to use the results in program planning and the evaluation of program effectiveness (Tripp & Zhu, 2005). Consequently, many local special education administrators lack the general knowledge on how to provide professional development and least restrictive environment options involving PE programs for students with disabilities (Gray, 2016; Stewart). This is especially troubling as PE is the only curriculum specifically identified in IDEA (U.S.C. § 300.108, 2004).

Perspectives of Physical Education

The perspective of local special education administrators is a primary barrier that could disrupt and prevent effective PE service delivery to students with disabilities (GAO, 2010; Stephens et al., 2011; Trip & Zhu, 2005). Some of the interviews conducted by GAO officials at various levels (i.e., state, district, school, disability organizations) cited a lack of importance was being placed on PE as an *academic* subject when compared with other academic subjects (e.g., math, history). Furthermore, many physical educators have reported that they only have contact with their administrators when student behavior becomes a concern or scheduling conflicts arise. This leads to physical educators feeling less valued than other teachers (Hodge & Akyffo, 2007). In addition, the GAO reported that school officials did not feel like they received much guidance on implementing PE programming for students with disabilities. Pickens and Dymond (2014) reported that in relation to specific areas within special education, special education administrators' knowledge and perception towards specific educational areas will have "... priorities within school districts and the resources allocated to support these priorities" (Pickens & Dymond, p. 291). In addition, it was noted that if special education administrators do not fully understand or perceive the importance of an educational area, students with disabilities might not receive that particular service, so they would not be able to benefit. Consequently, local special education administrators' perspectives and support towards various educational practices and programs have a great deal of influence on school priorities, availability of services, and the financial resources of a school (Bigbee, 2011; Coelli & Green, 2012).

Special Educator Barriers

Involvement in the IEP process

As it is essential to recognize the barriers special education administrators inadvertently introduce to adapted PE service delivery, it is also important to note that there are special educators are subject to a likewise position. Researchers have reported that many adapted PE and general PE teachers are not being invited to most IEP meetings (Columna et al., 2014; GAO, 2010; Gray, 2016). However, adapted PE teachers should be invited and involved in IEP meetings, if it has been determined by the IEP team that the student requires specially designed PE services (Columna et al.; GAO). This is concerning, as it was reported by the CDC (2015) that PE was being included in IEPs or 504 plans for students with disabilities in 87% of schools nationally; even though adapted PE and PE teachers are not generally involved in the IEP process. Many adapted PE teachers have expressed that there is a lack of collaboration between other school personnel and themselves (Hodge & Akuffo, 2007). It has also been reported that some PE teachers are only able to view a student's IEP and provide feedback, rather than attending the IEP meeting. In other districts, PE teachers are not accustomed to reading a student's IEP and are unaware when the IEP meetings occurred (Columna et al.).

Perspectives of Physical Education

Effective collaboration between adapted PE teachers and special educators can result in meaningful adapted PE for students with disabilities (Williams, Felix, Tymeson, & Hepler, 2014). Collaboration is especially important when taking into account the wide range of professionals with different backgrounds teaching adapted PE (Lee et al., 2007). Problems with developing successful adapted PE programs may stem from other academic professionals not acknowledging PE in the same light of importance as their own academic specialties.

Researchers have indicated that many classroom teachers have negative perceptions toward PE, and do not believe PE is an important subject (GAO, 2010; Lux & McCullick, 2011). It was reported by Morley, Bailey, Tan, and Cooke (2005) that teachers' perspectives on the inclusion of students with disabilities in PE were primarily based on the level of participation for students with disabilities and that this could be affected by the level of support and training opportunities available to the teacher. In addition, the teachers' perceived PE as being a distinctly different curriculum and required additional supports (i.e., paraprofessional support), although it was cited that they rarely saw the supports needed in PE for students with disabilities to be successful. It has also been suggested that these negative perceptions from other educators can significantly influence a PE teacher's performance (Lux & McCullick).

Possible Solutions

Local special education administrators and special educators can inadvertently introduce numerous barriers when attempting to implement an evidence-based PE program for students with disabilities. These barriers can be removed or drastically reduced by knowledgeable and supportive local special education administrators and special educators who regularly collaborate with adapted PE teachers. The authors have developed seven solutions for local special education administrators and special educators to directly improve their effectiveness in implementing a PE curriculum for students with disabilities. Further these solutions can be implemented to improve administrators' leadership abilities when implementing and evaluating adapted PE at various professional levels (i.e., teacher level, school level, district level), as well as, these solutions can be implemented to improve other educators (e.g., special educators, PE teachers) abilities to effectively collaborate with adapted PE teachers. These solutions are:

1. Develop and/or identify monitoring criteria related to PE programming for students with disabilities. Local special education administrators should use the monitoring of data to evaluate the effectiveness of PE program and make necessary adjustments. Local special education administrators could make accommodations and/or modifications to the use of a general PE evaluation instrument to monitor PE programs for students with disabilities. This specific instrument guides an evaluator on how to monitor the following domains in a PE setting: (a) instruction, (b) student learning, (c) management/organization, (d) learning climate, and (e) professionalism. The program monitoring criteria could be used to evaluate the effectiveness of the PE programming for students with disabilities in their schools, as well as, evaluate whether students are properly placed within a PE program (National Association for Sport and Physical Education, 2007).

2. Decide on the appropriate amount of PE programming for students with disabilities. While developing the proper amount of PE for students with disabilities it is important to consult with

the physical educator. The amount of regular and frequent PE exercise practice schedules is directly linked to the benefits of exercise. With this in mind, it is essential that an adequate amount of PE classes for students with disabilities be scheduled. Further, it is essential to strategically plan a teacher’s caseload, the number of schools serviced, student schedules, and the amount of traveling time between schools for effective APE programming (Columna, Davis, Lieberman, & Lytle, 2010; Li et al., 2016; Rimmer et al., 2007).

3. Collaborate with general school administrators, adapted physical educators, and general physical educators, as well as actively monitor current educational issues and trends related to adapted PE. For example, recently the Office of Civil Rights used the mechanism of notice with a “Dear Colleague Letter” to all special education administrators and athletic directors outlining recommendations for including students with disabilities in extracurricular activities to include athletics and sports (Department of Education: Office of Civil Rights, 2013). These findings should be shared with school district personnel and incorporated into the initiatives linked to the school’s vision and goals, see Table 1.

Table 1

Dear Colleague Letter Key Points

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- Reviews mandates developed in former federal laws (e.g., Section 504 of the Rehabilitation Act of 1973) that stipulate that children with disabilities cannot be denied educational services on the basis of their disability.
 - Explains that school must develop formal performance assessments for acceptance or denial of participation in sports program.
 - Defines equal opportunity for participation in school activities, such as school sponsored interscholastic teams; alternative activities such as clubs and intramurals.
 - Explains that schools can and should also offer different and/or separate athletic opportunities for students with disabilities, such as wheelchair sports and sports for students with visual impairments.
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4. Advocate for and attend in-service training focused on adapted PE. These trainings should be delivered by physical educators’ with at least a master’s degree in adapted PE and who are nationally certified (APENS; Kelly, in revision). Training should focus on: (a) PE competencies and knowledge, (b) federal and state legislative mandates affecting PE for students with disabilities, (c) IEP participation responsibilities with a focus on appropriate placement criteria for PE, and (d) how to evaluate and monitor PE goals and PE services delivering for students with disabilities (Gray, 2016; Yell et al., 2012). By providing these trainings knowledge sharing can be increased and the benefits of effective and appropriate adapted PE programs can be implemented in a variety of settings.

5. Promote an atmosphere that embraces collaboration and knowledge-sharing (i.e., disseminating and exchanging knowledge and skills) among physical educators, special educators, related-service personnel, school administrators, and other educators is highly encouraged. Physical educators should be active members of the district’s special education process. They should be involved in the IEP process and actively give input on topics such as placement options, eligibility for services and goals for PE and related areas (e.g., physical,

occupational, speech therapy). Additionally, knowledge sharing initiatives should be implemented by the special education administrator, allowing physical educators to be more involved in the decision-making process so that they feel empowered (Choi, French, & Silliman-French, 2013; Williams et al., 2014).

6. Build awareness of general physical educators and special educators regarding existing PE services for students with disabilities. This could involve advocating to local special education administrators to establish an incentive program for general physical educators, special educators, or related-service personnel to enroll in a university course in adapted PE or pursuing additional opportunities for co-teaching with an adapted PE teacher. Additionally, an incentive program could also be implemented giving those actively educating themselves school-wide recognition or letting them attend and/or present at a conference to increase their knowledge or sharing adapted PE programming for students with disabilities. In addition, giving them other resources, such as handbooks and websites (see Table 2), which explain the need, benefits, and effective models for adapted PE can increase their understanding of the importance of adapted PE.

Table 2
Adapted PE Resources

Website: ncpeid.org	The national consortium for PE for students with disabilities official website which offers information on research, professional development, and advocacy of PE for individuals with disabilities.
Podcast: What's New in Adapted Physical Education	A free podcast that interviews panels of experts within the field of adapted PE on topics related to adapted PE (e.g., transition process, behavior management).
The Adapted Physical Education Resource Manual	A manual that was developed to assist parents, educators, and administrators in locating resources related to adapted PE. Located at shapeamerica.org .

7. Advocate for hiring general PE teachers who either have a degree or endorsement to teach adapted PE, or have a plethora of experience teaching PE to students with disabilities. Although many states do not require a specific certification for adapted PE (see Table 3; Wetzel, 2007), a national certification in adapted PE is available (i.e., Adapted Physical Education National Standards [APENS]; Kelly, in revision) and university preparation programs that ensure adapted PE competencies are embedded throughout their programs (NCPEID, 2018). This is important as many PE teachers are not adequately trained to teach students with disabilities (GAO, 2010).

Table 3
States that require adapted physical education certifications

California	Michigan	Ohio	South Dakota
Louisiana	Minnesota	Oregon	Wisconsin
Maine	Nebraska	Rhode Island	Wyoming

Conclusion

Numerous barriers have been identified that limit effective PE service delivery for students with disabilities (e.g., lack of knowledge, funding). Local special education administrators contribute to these barriers, as they are able to guide entire school curriculums and provide vision and direction to various curricula, such as PE, for students with disabilities (Bigbee, 2011; Coelli & Green, 2012; Tripp & Zhu, 2005). Special educators are also a factor that prevent effective PE for students with disabilities, as they interact with the adapted PE teachers on a more regular basis and may also be expected to provide adapted PE to students with disabilities (CDC, 2015; Lee et al., 2007).

Fortunately, solutions to most of these barriers exist. Local special education administrators and special education educators are able to actively increase their knowledge and awareness of PE services for students with disabilities and actively collaborate with adapted PE teachers to develop and deliver effective adapted PE programming for students with disabilities. It is essential that all stakeholders (e.g., local special education administrators, special educators, adapted PE teachers) make an attempt to learn more about one another's area of expertise and identify ways to collaborate with one another, thus facilitating not only quality PE programs, but also an overall quality education for all students.

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