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INCLUSIVE SETTINGS IN ADAPTED PHYSICAL ACTIVITY

A worldwide reality?

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In September 2014 Ecuadorian leaders met to discuss inclusion of children with disabilities in education. These officials recognized they had a long way to go as there were no laws in Ecuador for inclusion of children with disabilities. Yet, in some rural schools children with physical disabilities were being included seamlessly and without question because it was the right thing to do.

In this chapter we address inclusion from a global perspective. We begin by defining inclusion and describing international efforts to enhance legislation and teacher skills, while pointing out common barriers. We then use the Theory of Planned Behavior as a theoretical framework from which to discuss inclusion. Lastly, we explore major issues related to inclusive practice around the world outlining several possible solutions within a variety of different cultures. The chapter concludes with suggestions for future research.

What is inclusion?

Inclusion describes the philosophy of merging special and general education (Block, 2016; Lipsky & Gartner, 1987; Stainback & Stainback, 1990; see also Chapter 32 by Makopoulou & Thomas, this volume). The term reflects a philosophy in which all children, regardless of abilities or disabilities, are educated within the same environment; an environment where each child’s individual needs are met (Downing, 2001; Stainback & Stainback, 1990; Stainback, Stainback, & Bunch, 1989). The philosophy of inclusion is perhaps best summed up by the following statement: “Although some children, especially those with severe and multiple disabilities, may have unique ways of learning, separating them from others who learn in a different way is unnecessary and could prevent them from achieving their full potential” (Downing, 2001, p. xii). It also is important to note that an inclusion philosophy goes beyond simply physically placing a child in a general education classroom. As noted by Stainback and Stainback (1990, p. 3), “An inclusive school is a place where everyone belongs, is accepted, supports, and is supported by his/her peers and other members of the school community in the course of having his/her educational needs met.” Rapp and Arndt (2012, p. 30) point out that “Inclusion is an attitude not a place.” For example, in physical education a child with
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cerebral palsy and an intellectual disability and uses a walker may participate in a soccer/football unit with a peer tutor for support using a ball larger than a typical soccer ball. Rule accommodations require that she receive the ball in a play before either team could attempt to score. The teacher also could have another student use a wheelchair or walker on the other team to even out the sides.

Children with disabilities enrolled in an inclusive physical education class should receive an individually determined, appropriate program with supplementary services and supports to meet their unique needs. In addition, these services also are provided to the child with a disability within the general education environment (Block, 2016; Downing, 2001; Lieberman & Houston-Wilson, 2009). In terms of physical education services, this means that an adapted physical education specialist, a trained general physical education specialist, a trained teacher assistant, or trained peer tutor provides individually determined goals, objectives, and accommodations within the general physical education setting. This concept of bringing services to the general education setting provides continual opportunities for children with disabilities to interact with, learn from, and form friendships with peers while ensuring that they receive an appropriate, individualized program (Hodge, Lieberman, & Murata, 2012). For example, a child learning to push his wheelchair or walk using crutches can be included in a general physical education primary school class. When children are playing a dodging and fleeing game with lots of running, the child with the physical disability can participate in the game and practice moving his wheelchair or walking on crutches. The advantage of having him in general physical education is that the stimulating environment motivates him to move around with his peers, and he receives added opportunities to interact with peers without disabilities.

Another critical tenet of the inclusion philosophy is that children with disabilities are the responsibility of both general and special education staff (Individuals with Disabilities Education Act – IDEA; United States Government, 2004). Unlike traditional self-contained programs in which the special education teacher (with the support of related services personnel) was solely responsible for a child’s education, in inclusive programs all the school staff are responsible, making sure that each child’s educational program is carried out appropriately (Hodge et al., 2012). The inclusion philosophy suggested that only through the merger of resources, knowledge, and talents of general and special education can both children with and without disabilities receive a comprehensive, appropriate education. General education teachers need continual support and training to make such a merged system work. In addition, the use of various co-teaching arrangements (the general and special education teacher dividing and sharing class instruction) can be an effective way to facilitate inclusive programs. Grenier (2011) showed how having an adapted physical educator support a child in a general physical education class allowed the child to be successfully included without disrupting other students or burdening the general physical educator. Many societies, although attempting to comply with international recommendations for inclusion, do not have policies or resources for teacher training or priorities in budgeting additional personnel for helping teaching inclusive classes.

**United States federal intervention: Individuals with Disabilities Education Act and least restrictive environment**

Because children with disabilities benefit from interactions with children without disabilities, the United States government enacted the Education for All Handicapped Children Act in 1975 (PL 94–142). Now known as the Individuals with Disabilities Education Act (IDEA), this
landmark legislation guaranteed the rights of individuals with disabilities to a free, appropriate public education. Included in this legislation was a provision designed to ensure that children with disabilities are placed in general education programs with opportunities to interact with peers without disabilities as often as possible. Termed the least restrictive environment (LRE) in IDEA, the provision directs public agencies:

1. To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled; and
2. That special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily. (20 U.S.C. 1412 [5][B])

This law requires that the LRE for students with disabilities is, whenever possible, the same environment in which students without disabilities receive their education. Clearly, students with disabilities should be placed in general schools and general classrooms (including general physical education) whenever possible (Aufsesser, 1991; Turnbull, 1990).

Inclusion around the world

In 1994, the United Nations Educational, Scientific, and Cultural Organization (UNESCO, 1994) emphasized the right to inclusive education via the Salamanca Statement and Framework for Action on Special Needs Education. As a result, governments around the world began enacting legislation and policy to ensure children with disabilities were included in the public school system, not in separate schools (Pecora, Whittaker, Maluccio, & Barth, 2012). This international trend of including students with disabilities in general education can be seen in general physical education (GPE) classes across the globe in places such as the Czech Republic (Kudláček, Válková, Sherrill, Myers, & French, 2002), Ireland (Meegan & MacPhail, 2006), the Republic of (South) Korea (Jeong & Block, 2011), Greece (Panagiotou, Evaggelinou, Doulkeridou, Mouratidou, & Koidou, 2008), Israel (Hutzler & Levi, 2008), Portugal (Campos, Ferriera & Block, 2014), and Japan (Sato, Hodge, Murata, & Maeda, 2007). The following sections provide a review of the state of inclusion in select places around the world.

Legislation promoting inclusive education

Many countries have enacted legislation to support an inclusive philosophy and to move away from traditional models of sending children with disabilities to special schools. Italy and Brazil, for example, enacted legislation in 1988 requiring the inclusion of students in general education settings in regular schools, while other countries, such as Ecuador, have more recently followed this trend (Brazil, 1988). In the mid 1990s Brazil enacted the Guidelines and Bases of National Education (Law 9.394/96, Brazil, 1996) promoting a nationwide public awareness about inclusion. This law asserted that all children have the right to education (article 205), and that children who have special educational needs must have access to education “preferably in the public regular school system.” More recently Brazil enacted the National Policy on Special Education from the Perspective of Inclusive Education (Brazil, 2007) to ensure the inclusion of children with special
education needs in regular public schools. The policy applies to three distinct groups: children with physical, sensory, and intellectual disabilities; children with pervasive developmental disorders (Autism Spectrum Disorder, Attention Deficit and Hyperactivity Disorder, Learning Disabilities); and talented/gifted children.

Similarly, beginning in 1986, Portugal enacted public education laws to promote equality of opportunity in education and to provide improvements in the quality of teaching for students with disabilities. These laws have increased considerably the inclusion of students with disabilities in regular education (Campos et al., 2014). In the Republic of Korea, two powerful laws related to inclusion of children with disabilities in public school have increased opportunities for these children to participate with their peers in regular classes. The Anti-Discrimination Against and Remedies for Persons with Disabilities Act (ADARPD; Korea Ministry of Health and Welfare, 2010), and the Act on Special Education for Persons with Disabilities and Others (SEPD; Ministry of Education, Science and Technology, 2013) permitted school districts and Special Education Support Committees to manage inclusive education. Within SEPD, Article 21 (Integrated Education), heads of each school are required to make an effort to implement integrated education when carrying out various types of policies regarding education. In addition, Article 13 of ADARPD forbids daycare facilities, elementary and secondary education institutions from rejecting persons with disabilities. Further, an educational officer must provide career planning education and information suitable to the abilities and characteristics of persons with disabilities in regard to job training, career planning, and information (ADARPD; Korea Ministry of Health and Welfare, 2010). These laws are required so that students with disabilities can have proper education depending on their level and type of disability.

A greater number of students with disabilities included in general schools

As a result of legislation and changing public opinion, more children with special education needs around the world are now receiving their education in general education schools. In Brazil, results of the 2012 School Census indicate increased enrollment in public school special education. According to preliminary results from the Brazil School Census (Brazil, 2013), the enrollment of students with disabilities in public schools over the last 10 years has increased 493%. Recently, data from Portugal showed 98% of students with SEN attended general schools compared to 75% in 1997 (Rodrigues & Nogueira, 2010). These figures place Portugal in the group of European countries with the highest rate of inclusion education for students with disabilities. Other European countries, however, have been slower to enact more inclusive models of educating students with SEN. For example, Latvia, Hungary, and Belgium still rely on special schools more than most other European countries (World Health Organization, 2011).

As was the case in Europe, some countries in Asia are making more progress towards including students with disabilities in general schools while others still rely mostly on special schools. In South Korea 79,711 students with disabilities received special education in 2010. Of those, 55,935 (70%) received their education with peers in the general school environment, while 23,776 (30%) received their education in special schools (Ministry of Education, Science, and Technology, 2011). In contrast, conversations with researchers in China suggest that the majority of students with disabilities still attend special schools (personal correspondence, Wang Yongshun, Beijing Sport University, October 15, 2014). In some continents such as in Africa and South America information about this issue is not always easy to retrieve given the language barrier, and lack of accessibility/dissemination of information in international publications and scientific development.
Experiences of students with special education needs in physical education

While statistics from Brazil, Portugal, Korea, Israel, and other countries are encouraging, APA scholars and educators argue that the data do not accurately reflect the reality of the situation. For example, one researcher from Brazil noted that many children with disabilities, particularly those with more severe disabilities, still remain functionally excluded from general education settings (Mauerberg-deCastro et al., 2013). Similarly, a researcher in Portugal noted that, although current legislation in Portugal recognizes the importance of inclusion of students with disabilities, most schools, teachers, and students without disabilities are not prepared to include students successfully. In addition, the existence of policies promoting inclusive philosophies are not by themselves sufficient to guarantee the implementation of inclusive practice in Portuguese schools. In South Korea many principals still refuse to accept students with special education needs, and a recent research study found that half of the physical education teachers chose not to include students with disabilities in their general programs (Jeong & Block, 2011).

In less developed countries including many on the African continent, the Caribbean, and the People’s Republic of China many parents feel embarrassment and shame for having a child with a disability. The local culture pushes parents to either keep their child at home or send them to special schools. The result is outright exclusion and placement in special schools (Yang, Jia-Hong, Yu-Liu, & Kudláček, 2012).

There have been several studies from across the world exploring experiences of inclusion in GPE from the perspective of students with SEN (Asbjørnslett & Hemmingsson, 2005 [Norway]; Bredahl, 2013 [Norway]; Fitzgerald, 2005 [United Kingdom]; Fitzgerald & Stride, 2012 [United Kingdom]; Hutzler, Fliess, Chacham, & van den Auweele, 2002 [Israel]; Spencer-Cavaliere & Watkinson, 2010 [Canada]). While these studies reported many benefits of being included in GPE, they also reported negative experiences expressed by the students with disabilities. The two most common themes that accompany negative experiences were: feeling different and lack of competence. Feeling different was reported due to (a) type of activities in which the students were involved (e.g., playing different activities in PE instead of soccer, individual activities instead of class activities), (b) locations in which the activities were taking place (e.g., away from the class or in a separate room), (c) teacher assigned social roles or activity positions (e.g., spectator, goalie, scorekeeper), (d) teacher granted exemptions and preferential treatment (e.g., waiving the requirement of going outside in the cold weather), (e) interruptions of and dependency on a personal assistant, and (f) students’ own sense of physicality.

The second most common theme noted was students’ perceptions of lack of competence (Asbjørnslett & Hemmingsson, 2008 [Norway]; Bredahl, 2013 [Norway]; Fitzgerald, 2005 [United Kingdom]; Fitzgerald & Stride, 2012 [United Kingdom]; Spencer-Cavaliere & Watkinson, 2010 [Canada]). GPE provides many opportunities for making one’s abilities, skills, and behaviors clearly visible (Tannehill, MacPhail, Halbert, & Murphy, 2013). Interviews revealed that if students with a disability had difficulties performing a skill or controlling their movements or behaviors due to their disability, they felt they were being looked at by peers, causing feelings of embarrassment, incompetence, and inadequacy. Such feelings were even more prevalent when peers without disabilities were frustrated with the challenges the students with disabilities faced (e.g., becoming angry when students did not catch a ball) (Bredahl, 2013).

Beliefs about students with disabilities

As reported in the previous section, for PE teachers to effectively include children with disabilities, it is important for them to know which behaviors help students feel included and excluded.
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in PE class. In addition, it is important to understand teachers’ attitudes and beliefs and what helps them facilitate the inclusion process. This section reviews research related to children without disabilities’ attitudes and beliefs. This section is followed by an examination of teacher perspectives on the inclusion of children with disabilities.

Beliefs of students without disabilities

A number of research studies have suggested that beliefs of students without disabilities play a critical role in fostering feelings of acceptance, respect, and perceived competence in students with a disability (e.g., André, Louvet, & Deneuve, 2013 [France]; Asbjørnslett & Hemmingsson, 2008 [Sweden]; Kalymon, Gettinger, & Hanley-Maxwell, 2010; Obrusnikova, Block, & Dillon, 2010 [U.S.A.]; Obrusnikova, Dillon, & Block, 2011 [U.S.A.]; Seymour, Reid, & Bloom, 2009 [Canada]; Spencer-Cavaliere & Watkinson, 2010 [Canada]). More specifically, researchers have found a majority of middle school-aged students without disabilities have positive beliefs toward playing with a peer with a disability in their GPE classes. This perspective seems to lead to stronger intentions to play with this peer (Campos et al., 2014 [Portugal]; Obrusnikova et al., 2011, 2012 [U.S.A.]; Papaioannou, Evaggelinou, & Block, 2014 [Greece]; Verderber, Rizzo, & Sherrill, 2003 [U.S.A.]). The most frequently cited attributes of the student without a disability associated with favorable beliefs are being female (Obrusnikova et al., 2011; Obrusnikova & Dillon, 2012), having stronger social responsibility goals (i.e., students with secure, positive relationships with their teachers and peers), and having stronger task-involved goals (i.e., students who focus on the skill development and demonstration of competence rather than focusing on trying to win) (Obrusnikova & Dillon, 2012).

In contrast, attributes of students with disabilities associated with less favorable beliefs or experiences by students without disabilities were (a) having different interests and lower competence levels (André et al., 2013; Kalymon et al., 2010; Obrusnikova et al., 2010; Seymour et al., 2009), (b) not spending time interacting with students without disabilities during and outside of school (Kalymon et al., 2010; Seymour et al., 2009), (c) affecting safety in GPE (Obrusnikova et al., 2010; Verderber et al., 2003), (d) having a lower social status among peers (Kalymon et al., 2010; Obrusnikova et al., 2010), (e) being given differential treatment by adults (Kalymon et al., 2010), and (f) being assisted by an adult (Kalymon et al., 2010).

General physical educators’ beliefs about inclusion and teaching students with disabilities

Research suggests GPE teachers have mixed opinions regarding inclusion. While many GPE teachers are not opposed to including SEN in their classes, some do not feel adequately prepared or knowledgeable about strategies to accommodate these students (Crawford, O’Reilly, & Flanagan, 2012 [Ireland]; Fejgin, Talmor, & Erlich, 2005 [Israel]; Hodge et al., 2009 [USA]; Jeong & Block, 2011 [South Korea]; Jerlinder, Danemark, & Gill, 2010 [Sweden]; Lieberman, Houston-Wilson, & Kozub, 2002 [USA]; Lienert, Sherrill, & Myers, 2001 [Germany]; Mauerberg-deCastro et al., 2013 [Brazil]; Meegan & MacPhail, 2006 [Ireland]; Özer et al., 2013 [Turkey]; Sato et al., 2007 [Japan]; Vickerman & Coates, 2009 [United Kingdom]). For example, in Ireland, research by Meegan and MacPhail (2006) indicated that physical education teachers do not feel adequately prepared to accommodate students with SEN in physical education classes. This may be the result of limited preparation as noted by Barry-Power (2010) who found a low number of physical education teachers had received initial teacher
training or the opportunity to gain further training once qualified in the area of special needs and inclusion.

Key barriers to inclusion consisted of unsuitable access to facilities, game-dominated physical education, and negative attitudes of students without disabilities towards classmates with SEN. Meegan and MacPhail (2006) also highlighted areas of PE teacher neglect including the development of individual education plans (IEP) and input into the IEP planning process. Additionally, the role and training of special needs assistants (SNAs) to aid in the inclusion of students with disabilities in physical education needs further investigation and development. Training and utilizing teacher assistants (or paraeducators) has been reported in other countries as well (e.g., Davis, Kotecki, Harvey, Oliver, 2007 [U.S.A.], Haycock & Smith, 2011 [United Kingdom]).

**Favorable beliefs**

Among the teacher-related variables associated with more favorable beliefs were being female (Fejgin et al., 2005 [Israel]; Meegan & MacPhail, 2006 [Ireland]), having adequate academic preparation (Obrusnikova, 2008 [U.S.A.]; Özer et al., 2013 [Turkey]; Tripp & Rizzo, 2006 [U.S.A]), having positive clinical experiences (Jerlinder et al., 2010 [Sweden]; Obrusnikova, 2008; Özer et al., 2013; Tripp & Rizzo, 2006), receiving information about the student's label or disability (Grenier, 2011; Tripp & Rizzo, 2006), and having a higher level of perceived competence to work with students with disabilities (Obrusnikova, 2008; Özer et al., 2013; Tripp & Rizzo, 2006).

The most common student-related variables associated with GPE teachers' favorable beliefs were the type and degree of a student's disability. GPE teachers held less favorable beliefs toward teaching students with severe disabilities or those who exhibited inattentiveness, hyperactivity, or had emotional-behavioral disorders (Ammah & Hodge, 2006; Hersman & Hodge, 2010; Hodge et al., 2009; Obrusnikova, 2008; Sato et al., 2007). Difficulties teachers experienced in accommodating a wide range of abilities and managing student behaviors during GPE instruction seem to adversely affect their self-confidence and perceived behavioral control (Hersman & Hodge, 2010; Hodge et al., 2009; Jeong & Block, 2011; Sato et al., 2007). Still, there are GPE teachers who accept the challenge of teaching students with severe disabilities because they become motivated to educate themselves on how to modify instruction and activities to meet their students’ needs (Grenier, 2006; Hersman & Hodge, 2010; Hodge et al., 2009).

**Assisting teachers to provide quality experiences**

Hersman and Hodge (2010) and Özer et al. (2013) reported that better quality professional training, positive clinical experiences, and adequate support and teaching conditions are critical in facilitating a teacher’s sense of behavioral control associated with teaching efficacy. However, consistent with prior research on inclusion (e.g., LaMaster, Gall, Kinchin, & Siedentop, 1998), many GPE teachers do not perceive their professional preparation, clinical experiences, support, and teaching conditions to be adequate (Fejgin et al., 2005; Hersman & Hodge, 2010; Jerlinder et al., 2010; Vickerman & Coates, 2009). For example, GPE teachers in Israel complained they do not receive support and professional help from the other instructional team members such as school counselors, special education teachers, and APE teachers (Fejgin et al., 2005).

**Teaching conditions**

In other studies (e.g., Ammah & Hodge, 2006; Hersman & Hodge, 2010; Hodge et al., 2009), teachers were concerned with various contextual issues such as lack of adequate equipment,
limited instructional space, and large or overcrowded classes, particularly when working with students with emotional and behavioral disorders (Fejgin et al., 2005). Teachers perceived that contextual issues negatively affected teaching method selection, lesson pace, classroom safety, students’ motivation to participate in activities, and the type of social interaction between students with and without disabilities (Fejgin et al., 2005; Hersman & Hodge, 2010; Suomi, Collier, & Brown, 2003). If GPE teachers are not provided the means to support students with SEN in general physical education, then inclusion will not be effective and teachers will not be in favor of having students with disabilities in their classes (Fejgin et al., 2005; Vickerman & Coates, 2009).

Analysis of international culture in the area of inclusive education related to the Theory of Planned Behavior

Teachers’ attitudes are an important determinant of behavior in educational settings and one of the most important factors for successful implementation of inclusion in GPE. Teachers’ beliefs toward inclusion are extremely important to understand especially related to their evolution. From a psychological perspective behavioral beliefs link the behavior of interest to expected outcomes (see also Kulinna & Cothran, Chapter 36, this volume). A behavioral belief is the subjective probability that the behavior will produce a given outcome. Ajzen (1991) also claims that, although a person may hold many behavioral beliefs with respect to any behavior, only a relatively small number are readily accessible at a given moment.

One of the most significant theories relating to this attitude-behavior relationship is Ajzen’s (1991), Theory of Planned Behavior (TPB) which evolved from the Theory of Reasoned Action (TRA) (Fishbein, 1967). TPB assumes that an individual’s intention to perform a given behavior is the best predictor of that behavior (Francis et al., 2004; Martin & Kudlác­ek, 2010; Meegan & MacPhail, 2006; Verderber et al., 2003). As a general rule, the more favorable the individual’s attitude and subjective norm and the greater their perceived control, the stronger the individual’s intention to perform the behavior (Ajzen, 2002).

When applied to teaching students with disabilities in physical education, the TPB suggests that teaching is influenced by several psychological factors including teachers’ beliefs regarding students’ behavioral outcomes and evaluations, the expectations placed on them, their motivation to comply with such expectations, as well as the presence or absence of factors and resources that may help or hinder these students and their teaching. For example, a teacher who believes she can include a child who has a visual impairment in a floor hockey unit might ask the vision teacher questions, talk to the student herself, and e-mail the student’s previous teacher to gain information. Once she learns about tasks that have and have not worked previously, the teacher trains several peer tutors, borrows and deflates a bell ball to slow down the game a bit so that all students can play more successfully. She could add a beeper to the back of the goal on the offensive side to orient the student who is blind. In this example, it took the students two weeks to get used to the variations, but then everyone was playing red faced, sweating, and having a ball! This teacher believed she could include this student and went out of her way to make it happen. Many teachers that do not have this belief might say this unit is too dangerous, the puck moves too fast, and the child should dance or play exergames during this unit (Perkins, Columna, Lieberman, & Bailey, 2013).

Summary of current trends and issues

Globally, physical education teachers’ lack of training in inclusion is the biggest barrier to educating children with disabilities. International research examining preparation of
preservice PE and SEN teachers indicates that initial teacher training providers are inconsistent in the amount of time spent addressing the issue and the nature of curricular content (Vickerman & Coates, 2009). The lack of training leads teachers to feel inadequate, and, as a result, children with disabilities are often unnecessarily excluded from physical education (Mauerberg-deCastro et al., 2013; Özer et al., 2013, Sato et al., 2007). Addressing lack of training that is so pervasive in the literature could assist PE teachers to deal more effectively with these situations as they arise.

Another major theme found in recent research examining inclusion involved contextual issues within the teaching environment, such as lack of adequate space, inadequate paraeducator training, lesson pace, and overcrowded classes, and lack of adequate or necessary equipment (Feijing et al., 2005; Hersman & Hodge, 2010). These issues can be major barriers to skill acquisition for any child, and especially children with disabilities. The lack of equipment, even basic equipment, such as wheelchairs for children with mobility impairments, and other resources is often due to lack of funding but also may be caused by lack of availability of appropriate and necessary equipment. For example, developing countries may not have access to goalballs used for students with visual impairments. In addition, PE teachers often are unaware of the relevance of this game for students with visual impairments.

Implications for evidence-based practice

Social attitudes are frequently documented as a major hindrance to inclusion (Lieberman & Houston-Wilson, 2009). Role models can dispel myths about the ability levels of individuals with disabilities. High performing athletes with disabilities like Marla Runyan, Natalie du Toit, Dartanyan Crocket, Chris Ahrens, and Tatyana McFadden also can change the way people see individuals with disabilities. In addition, more disability awareness programming must be implemented in schools to help able-bodied children perceive the potential abilities of all individuals with disabilities (Lieberman & Houston-Wilson, 2009).

As described previously, major barriers to inclusion are lack of teacher training and attitudes among peers and teachers. It appears that these barriers can be explained, in part, using the Theory of Planned Behavior. For example, when teachers do not understand how inclusion will affect the outcome of the child’s performance, they are unlikely to have a positive attitude toward inclusion. The universal lack of physical education teacher education training for inclusive settings often leads to a lack of understanding about the benefits of inclusion and the way to include students effectively. Professors in higher education also must be trained and encouraged to discuss the benefits of inclusion and teach effective strategies, such as universal design for learning, differentiating instruction (Gregory & Chapman, 2013), peer tutoring (Lieberman & Houston-Wilson, 2009), as well as methods to train and utilize paraeducators, to ensure the appropriate inclusion of children with disabilities (Block, 2016) (see Table 17.1).

In the future researchers across the world must address the issue of negative attitudes and stereotypes about individuals with disabilities. Researchers also must perform intervention studies to verify the effects of disability awareness, peer tutoring, paraeducators’ training, modifying activities, and improving attitudes toward disabilities. Lastly, they must create curricula for college professors to adequately instruct professional preparation students on inclusive strategies for physical education.
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<th><strong>Strategy</strong></th>
<th><strong>What it is</strong></th>
<th><strong>Resources</strong></th>
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<tr>
<td>Universal Design for Learning</td>
<td>The provision of UDL in physical education helps to meet the needs of all learners in terms of: what they learn, how they learn, and why they learn. By purposefully, intentionally, and proactively designing the curriculum the teachers can foster the development of expert learners (Rapp, 2014).</td>
<td>Lieberman &amp; Houston-Wilson, 2009 Rapp, 2014 Rapp &amp; Arndt, 2012</td>
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<tr>
<td>Differentiating Instruction</td>
<td>Differentiated Instruction offers several options for learning, and it does not assume that each individual child would need a separate, unique adaptation. For example, a student with cerebral palsy who has balance and coordination challenges is in a throwing and catching unit. Rather than creating a unique accommodation for this student, the teacher proactively created a number of ways to experience, practice, and measure success in throwing and catching for all students including the use of scarves and balloons for catching and different distances and size targets for throwing. These “differentiated” options for throwing and catching are available to all students and not specifically designed for the student with a disability. As a result, this student has the opportunity to be successfully included in the unit not by having unique, individual accommodations but by taking advantage of the planned differentiated options offered to all children in the class.</td>
<td>Ellis, Lieberman, &amp; LeRoux, 2009</td>
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<tr>
<td>Peer tutoring</td>
<td>Peer tutoring is when children with disabilities are paired with a child with a mild disability or no disability. The peer tutor instructs and gives feedback to the child with the disability. Instruction can be unidirectional or bidirectional.</td>
<td>Cervantes, Lieberman, Magnesio, &amp; Wood, 2013; Klavina &amp; Block, 2013</td>
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<tr>
<td>Training paraeducators</td>
<td>Paraeducators, also known as teacher aides, teacher assistants, or special needs assistants are utilized to support the lead teacher. Paraeducators can be trained and used effectively in physical education to assist in teaching, feedback, safety, behavior, and motivation.</td>
<td>Hodge, Lieberman, &amp; Murata, 2012 Lieberman, 2007 Lieberman &amp; Houston-Wilson, 2009</td>
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Reflective questions for discussion

1. What is inclusion? To what extent can laws and policies enhance opportunities for inclusion? Use international examples to support your answer.

2. Historically, how has inclusion changed over the years? Did you attend schools and participate in GPE with students with disabilities? Did you view this experience positively or negatively? Provide examples to support your answer.

3. What are the major barriers to inclusion around the world? How are these different from barriers to effective teaching and learning in GPE?

4. What are some solutions to the barriers to inclusion found in this chapter? What other possible solutions might create more positive experiences for teachers and students with and without disabilities?

5. What steps can you take to improve the lives of children with disabilities in your classes, community, and country?

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