

An Alternative to Least Restrictive Environments: A Continuum of Support to Regular Physical Education

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The concept of least restrictive environments (LRE), originally conceived by Deno (1970) and Reynolds (1962) to advocate for a range of special education placements for children with disabilities, has become synonymous with a continuum of physical education placement options for students with disabilities. Many models have been presented over the years. Options range from full-time regular physical education in a regular school to full-time adapted physical education in a special school or facility, with various placement options in between. The emphasis of these models is on varying the placement to meet the needs of the student with disabilities. Taylor (1988) has identified several flaws to the concept of LRE placement options. In addition, many special education professionals advocate placing all students with disabilities in regular education with varying levels of support (e.g., Stainback & Stainback, 1990). This paper discusses an alternative to the traditional continuum of LRE placement options. This new model presents a continuum of support which emphasizes how much and what type of assistance is provided to a particular student with disabilities that will enable him/her to succeed in regular physical education.

Is the student too handicapped [to benefit from any particular setting]? [or] Is this environment sufficiently supportive [to help students achieve positive outcomes]? (Gaylord-Ross & Peck, 1985, p. 201)

Since the inception of PL 94-142, many have argued that the true meaning of least restrictive environment (LRE) has been misunderstood, misinterpreted, and misused by administrators, teachers, and parents alike (DePaepe, 1984; Grosse, 1991; Lavay & DePaepe, 1987; Peck & Semmel, 1982; Stein, 1978,

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Taylor, 1988). One reason LRE has been misinterpreted is that it is often equated with the concepts of mainstreaming, integration, and most recently the regular education initiative (Aufsesser, 1991; Grosse, 1991; Snell & Eichner, 1989). Are these terms synonymous with the concept of LRE as described in PL 94-142?

Mainstreaming was originally defined as the process of placing eligible students with disabilities into regular education classes with appropriate support services as determined by the student's IEP. The Council for Exceptional Children (1975) defined mainstreaming in terms of basic themes relative to what it is and what it is not. The Council suggested that mainstreaming was (a) providing the most appropriate education for each student in the least restrictive setting, (b) placing students based on assessed educational needs rather than clinical labels, (c) providing support services to general educators so they may effectively serve children with disabilities in the regular setting, and (d) uniting general and special education to help students with disabilities have equal educational opportunities. The Council noted that mainstreaming was not (a) wholesale return of all exceptional children to regular classes, (b) permitting children with special needs to remain in regular classes without the support services they needed, or (c) ignoring the need of some children for a more specialized program than could be provided in the general education program (Council, 1975).

Unfortunately, the term mainstreaming has never been identified with the Council's definition. Rather, it has been associated with the unsuccessful "dumping" of students with disabilities into regular education classes without support (DePaepe, 1984; Grosse, 1991; Lavay & DePaepe, 1987). Broadhead (1985) noted that many administrators purposely manipulated the meaning of mainstreaming to conform to available resources and preestablished programs, thus failing to provide an appropriate continuum of educational services. The term has been misused and distorted so much that it is no longer recommended terminology.

The term integration has been used primarily to describe the placement of students with disabilities in regular public schools (Ford & Davern, 1989; McDonnell & Hardman, 1989; Snell & Eichner, 1989). However, the concept of integration means more than physically placing students with disabilities in regular schools. It means that students with disabilities become full members of the schools they attend: that their presence in the regular school is fully supported by administration, staff, and peers; and that these students are active participants in regular school programs and events (Ford & Davern, 1989; Stainback & Stainback, 1990). Integration connotes a sense that the student with disabilities will be an accepted member of the school and that support services will be provided to ensure his/her success. Integration is more of an attitude or a feeling regarding the inclusion of students into regular education environments.

The regular education initiative (REI) is a term coined by Madeleine Will, then Assistant Secretary for the Office of Special Education and Rehabilitative Services. In her article, "Educating Students With Learning Problems: A Shared Responsibility" (1986), Will suggested that the current system of special education for students with mild disabilities was not effective. She noted that the dual program of special and regular education was redundant and costly and gave little evidence that students with mild disabilities learned more in a homogenous, segregated classroom compared to a heterogenous, integrated classroom (Will, 1986).

Will proposed several changes to the current dual system of special and

regular education, all of which were designed to consolidate the dual system and serve students with mild disabilities effectively in regular education. Her solutions included (a) increased instructional time, (b) empowerment of principals to control all programs and resources at the building level, (c) provision of support systems for regular teachers, and (d) the use of new approaches such as curriculum based assessment, cooperative learning, and personalized curricula (Will, 1986). In essence, REI encourages the elimination of traditional special education classrooms in favor of a new partnership between special education and regular education. REI has recently been expanded to include educating students with more severe disabilities in regular education (Giangreco, York, & Rainforth, 1989; Snell, 1988).

What Is the Least Restrictive Environment?

It is interesting to note that, even though each term is often interpreted differently, the basic philosophies of mainstreaming, integration, and even REI are relatively similar. All call for educating students with disabilities in a regular education environment alongside their nondisabled peers, with appropriate support services. Of more interest is the fact that the intent of these seemingly different terms are very similar to the original definition of least restrictive environment described in PL 94-142. The definition of LRE that first appeared in the Federal Register (August 1977) was as follows:

to the maximum extent appropriate, children with disabilities, including children in public and private institutions or other care facilities, are educated with children without disabilities, and that special classes, separate schooling, or other removal of children with disabilities from 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.

This passage suggests that the LRE for students with disabilities is one that, whenever possible, is the same environment where students without disabilities receive their education. Clearly, the lawmakers advocated placing students with disabilities in regular school and classroom settings whenever possible (Aufsesser, 1991; Snell, 1988; Taylor, 1988). It was deemed appropriate to place a student with a disability in a segregated program only after all efforts to place him/her in a regular setting, including the use of supplementary aids and services, were exhausted. In addition, lawmakers emphasized that placement of students with disabilities should be made on an individual basis and not on the basis of type or severity of disability (Aufsesser, 1991; Gent & Mulhauser, 1988; Grosse, 1991).

The Concept of a Continuum of LRE Options

In an attempt to clarify the notion of LRE, and in particular the definition of appropriate education, lawmakers developed a second statement regarding LRE. This statement suggested a continuum of placement options for students with disabilities which included regular classrooms, special classrooms, special schools, and residential facilities:

Each public agency shall insure that a continuum of alternative placements is available to meet the needs of children with disabilities for special education and related services. . . . The continuum . . . must include . . . (instruction in regular classes, special classes, special schools, home instruction, and instruction in hospitals and institutions). (Federal Register, 1977, p. 42497)

The idea of a continuum of alternative placement options for students with disabilities was not new in 1977. Reynolds (1962) was the first to call for a continuum of services for students with disabilities, ranging from least to most restrictive. Deno (1970), elaborating on Reynolds' suggestion for a continuum, introduced the notion of a cascade of educational placements for students with disabilities. In fact, Congress used Reynolds' notion of a continuum when developing this clarification of LRE (Hocutt, Martin, & McKinney, 1991). The description of LRE as a continuum of services was thus built into both PL 94-142 and the regulations regarding the law.

The definition of a continuum of services as outlined in the Federal Register has led to the legal interpretation of LRE as a continuum of placements that vary according to restrictiveness (i.e., the degree in which students with disabilities are separated from students without disabilities) (Aufsesser, 1981; Jansma & Decker, 1990; Taylor, 1988; Turnbull, 1990). In practice, the idea of a continuum has led to the development of hierarchical listings of placement options ranked from least to most restrictive, similar to the original cascade model proposed by Deno (cf. Aufsesser, 1991; Dunn & Craft, 1985; French, 1990; Grosse, 1991). Perhaps more than any other profession, adapted physical education has developed numerous LRE models of service delivery options all similar to Deno's original model. Virtually all adapted physical education texts include author-developed schematics regarding LRE alternatives. As an example of adapted physical education LRE models, Jansma and Decker's (1990) continua of placement options is listed below:

1. Full-time regular physical education
2. Part-time adapted and part-time regular physical education, flexible schedule
3. Part-time adapted and part-time regular physical education, fixed schedule
4. Full-time adapted physical education, regular school
5. Full-time adapted physical education, special school
6. Full-time adapted physical education, residential
7. Full-time adapted physical education, home
8. Full-time adapted physical education, hospital.

This hierarchical ordering of least restrictive environments assumes that (a) there is a generally accepted hierarchy of placements, with each alternative being clearly more or less restrictive than other alternatives on the continuum, (b) every student with a disability can be placed somewhere on the continuum, (c) each alternative is deemed appropriate (i.e., truly the least restrictive environment for a given student), and (d) as a student with disabilities develops additional skills, he/she can be "transitioned to a less restrictive placement" (Taylor, 1988).

While there are many schematics of LRE options in physical education, all are basically the same. The end of the continuum deemed least restrictive

places students in full-time regular physical education with minimal assistance; the middle of the continuum places students in part-time regular physical education and part-time adapted physical education; and the end of the continuum deemed most restrictive places students in full-time adapted physical education either in regular schools, special schools, or residential facilities.

The newest schematic of LRE options in physical education came from Aufsesser (1991). Aufsesser's model is an improvement over previous models because it includes several additional steps (e.g., consultation, peer tutors, reverse mainstreaming) for keeping students with disabilities in regular physical education. In addition, Aufsesser includes community based instruction as an alternative placement option for students with disabilities. However, the end of the continuum deemed most restrictive is still full-time adapted physical education in regular/special schools. Figure 1 presents Aufsesser's schematic of LRE options in physical education.

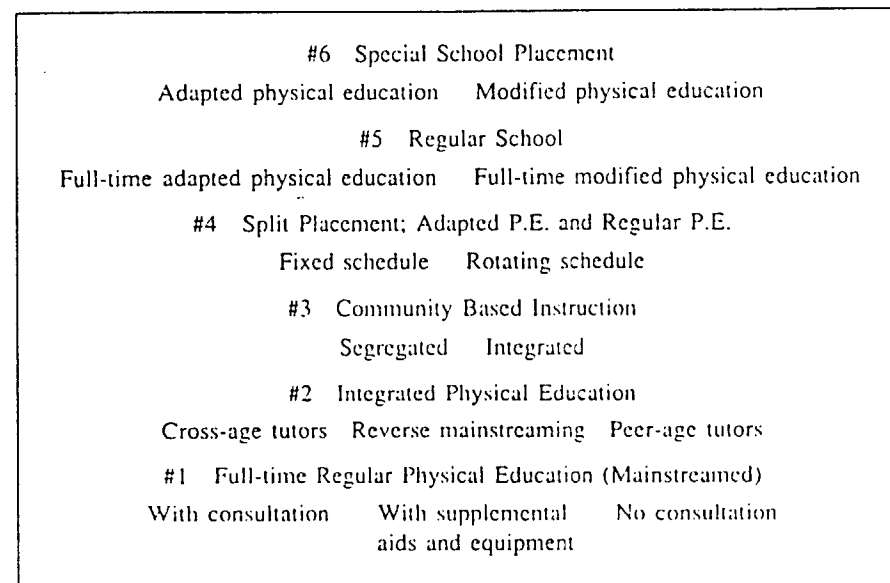


Figure 1—Least restrictive environment options in physical education (adapted from Aufsesser, 1991).

Problems With the Concept of a Continuum of LRE

Most adapted physical educators support a continuum of placement options for students with disabilities. In fact many staunchly argue against placing all students in mainstreamed physical education environments (e.g., Grosse, 1991; Jansma & Decker, 1990; Lavay & DePaepe, 1987). In 1977 the American Alliance for Health, Physical Education, Recreation and Dance supported a continuum of placements when Stein published the following interpretations for implementing the LRE mandates:

placing children in least restrictive environments does *not* mean mainstreaming or placing all handicapped children into regular classes. The law requires that these children be placed in the most normal environment in which they can potentially succeed. The least restrictive environment will be different for each child. Additionally, handicapped children can and should be placed into different environments for different subject matter and activities if these various learning environments are the best way to meet the child's educational needs.

Although the majority of adapted physical educators support a continuum of LRE, many special education professionals have criticized LRE and the idea of a continuum that includes segregated placements (e.g., Gent & Mulhauser, 1988; McDonnell & Hardman, 1989; Snell, 1988; Stainback, Stainback, & Forest, 1989; Thousand & Villa, 1991). Taylor (1988, pp. 45-48) outlined seven major pitfalls with the principle of a continuum of LRE options:

1. The LRE principle legitimates restrictive environments (if a particular continuum contains a level in which a student can be placed in a segregated setting such as a special school or residential facility, then such a placement must be appropriate for some students).
2. The LRE principle confuses segregation and integration on the one hand with intensity of services (i.e., type and frequency of services) on the other (the assumption of most continua is that intensive services cannot be provided in integrated settings, and this is not necessarily true).
3. The LRE principle is based on a readiness model (the assumption is that students must earn the right to "graduate" to a less restrictive environment, but does a segregated environment prepare a student for an integrated environment?).
4. The LRE principle supports the primacy of professional decision making (is placement in an integrated setting a clinical judgment or is it a moral and philosophical issue?) (Sherrill, 1985).
5. The LRE principle sanctions infringements on people's rights (the question implied by LRE is not *whether* people with developmental disabilities should be restricted, but *to what extent*) (Turnbull, Ellis, Boggs, Brookes, & Biklen, 1981, p. 17).
6. The LRE principle implies that people must move as they develop and change (the expectation is for persons with disabilities to move through the continuum and into less restrictive environments, but in many cases persons with disabilities, particularly those with more severe handicaps, are stuck at the most restrictive end of the continuum).
7. The LRE principle directs attention to physical settings rather than to the services and supports people need in order to be integrated into the community.

A second concern with the concept of a continuum of LRE options is that special education today is very different from what it was in 1975 when PL 94-142 was first enacted (as well as in 1977 when Stein wrote the position statement for AAHPERD). In 1975, when all that was offered was segregation or nothing at all, the emphasis was on developing a continuum of placement options and alternatives (Taylor, 1988). At that time a continuum of placement options was

a revolutionary concept in special education. In terms of physical education, the concept of a continuum prevented wholesale exclusion of students with disabilities from any type of physical education (Sherrill, 1991).

Now that all or at least the vast majority of students with disabilities are receiving a free education, the emphasis has shifted to the appropriateness of this education. For example, Brown and his colleagues (Brown, Branston, Hamre-Nietupski, Certo, & Gruenewald, 1979; Brown et al., 1991) argued for a chronologically age-appropriate, functional approach to education programs rather than a developmental approach, particularly for students with more severe disabilities and those in transition from school to community environments. Also, many special education professionals argue that the most appropriate education for students with disabilities, including those with severe disabilities, can only take place in regular classrooms (e.g., Brown et al., 1989; Giangreco & Putnam, 1991; Stainback & Stainback, 1990; Stainback et al., 1989).

Recent research in special education supports the idea that, all else being equal, integration is better than segregation (Brown et al., 1983; Brown et al., 1989; Gent & Mulhauser, 1989; Snell & Eichner, 1989; Taylor, 1988). Similarly, preliminary research in mainstreamed physical education programs supports the notion that children with mild or moderate disabilities can receive an appropriate physical education program in an integrated setting (Aufderheide, 1983; Karper & Martinek, 1985; Rarick & Beuter, 1985; Vogler, van der Mars, Darst, & Cusimano, 1990). As argued by Snell and Eichner "there is no program component or educational strategy that is provided in a segregated setting that cannot be implemented at least as effectively within a local public school. In addition, there are certain necessary elements to an appropriate education that cannot be provided in a 'handicapped-only' setting" (1989, pp. 109-110). Given Taylor's concerns and the new special education philosophies, adapted physical educators need to reexamine the continuum of physical education placement currently used in schools.

A Continuum of Support to Regular Physical Education

If the concept of a continuum of LRE placements is flawed, then what is the alternative? Certainly a return to dumping students with disabilities into the mainstream of education is no more appropriate today than it was in the 1970s and 1980s. Special education now promotes a *continuum of support* that enables students with disabilities to benefit from regular education environments (Giangreco & Putnam, 1991; Hitzing, 1987; Stainback & Stainback, 1990). This new continuum of support emphasizes how much and what type of assistance is provided to a particular student within regular education settings (as well as the support provided to that student's regular education teacher). The issue is no longer *which* setting is the least restrictive for a particular student. Rather, the issue is how much and what type of support does a particular student need to be successful in a regular education environment (Gaylord-Ross & Peck, 1985; Taylor, 1988; Stainback & Stainback, 1990)?

The idea behind this new continuum is that, given proper support and services, all students can receive appropriate, beneficial, safe, and successful education within the regular environment (Snell & Eichner, 1989; Stainback & Stainback, 1990; Taylor, 1988). Figure 2 contains our model of the continuum-of-support concept for physical education.

Levels 4 and 5, which provide the most assistance to students, combine part-time regular physical education with a one-on-one assistant and part-time adapted physical education. Comparing our continuum of support to Jansma and Decker's continuum (see Figure 1), Levels 4 and 5 (requiring the most support) in our model are the same as Level 2 (the second least restrictive environment) in the Jansma/Decker model. More important, the continuum in Figure 2 is based on how much support a particular student requires to participate successfully in regular physical education. Following is a more detailed description of the various levels of support provided in this model.

Level 1: No Support Needed

- 1.1 Student can make necessary modifications on his/her own
- 1.2 RPE teacher feels comfortable working with student

Level 2: APE Consultation

- 2.1 No extra assistance needed
- 2.2 Peer tutor watches out for student
- 2.3 Peer tutor assists student
- 2.4 Paraprofessional assists student

Level 3: APE Direct Service in RPE 1-2 Times/Wk

- 3.1 Peer tutor watches out for student
- 3.2 Peer tutor assists student
- 3.3 Paraprofessional assists student

Level 4: Part-time APE and Part-time RPE

- 4.1 Flexible schedule with reverse mainstreaming
- 4.2 Fixed schedule with reverse mainstreaming

Level 5: Reverse Mainstreaming in Special School

- 5.1 Students from special school go to regular school for RPE
- 5.2 Nondisabled students go to special school for RPE
- 5.3 Students with and without disabilities meet in community for recreation training

Figure 2 — A continuum of support to regular physical education (support from peers, volunteers, and paraprofessionals also should be provided in Levels 4 and 5).

Level 1: Full-time RPE With No Support

Level 1 refers to students with disabilities in full-time RPE with no need for planned consultation from an APE specialist or planned assistance from a peer tutor, paraprofessional, or APE specialist. This option is the least restrictive in terms of the amount of support needed by a student to be successful in regular physical education. This level has two sublevels:

Student Makes Necessary Modifications. Some students with disabilities can follow directions given by a teacher and can follow the curriculum without the need for special supports. Also, some students can independently make the modifications to RPE required for successful participation. Such students tend to

have either mild mental disabilities or physical disabilities with no associated mental or sensory impairments.

RPE Teacher Feels Comfortable Working With Student. Some RPE teachers are very comfortable and competent when working with students with disabilities. These teachers may have taken several courses in adapted physical education or may have substantial experience with students with disabilities. Other RPE teachers can become more comfortable working with such students by attending workshops, receiving in-services, or having an adapted physical education specialist provide direct and consultative support early in the program. In either case, at this level the RPE teacher is able to make the necessary modifications to ensure that the student with disabilities is included in RPE. Given proper support and training, most RPE teachers can learn to make the necessary modification that would ensure the successful inclusion of a student with disabilities in regular physical education. The APE specialist may meet periodically with the RPE teacher to ascertain the student's progress and the teacher's comfort level.

Level 2: Full-time RPE With APE Consultation

In Level 2 an APE specialist consults regularly with the RPE teacher to assure the successful inclusion of the student with disabilities into RPE. Support can be in the form of determining curriculum adjustments, activity modifications, behavior management techniques, communication skills, or assessing student skills. Consultation can also include assisting the RPE teacher in adapting equipment, writing specific long-term goals and short-term objectives, and specific activity modifications. Consultation can vary from one to two times per activity unit to one to two times per week depending on the situation.

It is critical at this level (and all subsequent levels) that the preplanning of instruction for the student with disabilities be developed by the APE specialist. If the APE teacher knows ahead of time what activity unit and specific skills will be taught, she/he can make the necessary modifications ahead of time. For example, say one of Mrs. Brown's 10th grade students has mild mental retardation and spastic diplegia cerebral palsy such that he ambulates by using a walker. Mrs. Brown has planned a soccer unit and consults with Mrs. Smith, the APE specialist for the school district. Mrs. Smith then writes an individualized physical education program for this student which includes (a) warm-up activities designed to stretch and relax tight flexor muscles and which can be performed independently by the student, (b) specific skill station modifications so that the student can work on passing, trapping, shooting, and playing defense in a way that is safe, beneficial, and successful for him, and (c) specific game modifications so that this student can participate in lead-up and regular games successfully, yet without interfering with the flow of the game for the nondisabled students. Consultative support is all that Mrs. Brown needed. The consultative level has three sublevels of support:

APE Consultation With No Extra Assistance Needed. In many cases the RPE teacher can work with the student with disabilities if given guidance from an APE specialist. The example of Mrs. Smith giving consultative support to Mrs. Brown without providing any direct assistance to the student demonstrates this sublevel. Some RPE teachers will move from Level 2 (consultative support) to Level 1 (no support needed) after learning that making accommodations for the student with disabilities is not that difficult.

Peer Tutor Watches Out for Student. It has been well documented that peer assistance can be used successfully in physical education (Long, Irmer, Burkett, Glassennapp, & Odenkirk, 1980; Webster, 1987). In a P.E. class of 25 to 30 nondisabled students it is likely that an RPE teacher would find at least 5 to 7 students who would be willing to help a peer who has a disability. Thus, peer assistance is usually readily available in RPE. If same-age peers are not available, cross-age peers who do volunteer work, are members of community civic groups, or even senior citizens can be recruited to assist a student with a disability in regular physical education. With proper training, peers and other volunteers can effectively assist students with disabilities in RPE.

For some students with disabilities, an occasional extra hand during physical education might be the difference between successful participation and failed integration. In such instances a peer can be assigned to watch out for the student with disabilities and assist the student as needed during the course of physical education. Assistance can be helping the student line up, helping him/her go to the correct station, reminding him/her to stay on task, or helping the student to get in and out of equipment. The peer at this level does not need to be with the student all the time. Rather, this peer will help the student by providing extra verbal cues or physical assistance as needed. Another option at this level is to have the entire class take responsibility for the student with disabilities. For example, if the student is confused as to which station to go to, a peer close to the student can help direct him/her to the correct station.

Peer Tutor Assists Student. For students with disabilities who are more distractible or who need more assistance to participate successfully in RPE, a peer tutor, whether same-age or cross-age, can be assigned to help the student throughout physical education. At this level the peer tutor should go through some special training to learn about the student's disabilities, skills, and interests, how and when to provide assistance, and emergency procedures. The APE specialist and the RPE teacher should give the peer tutor specific direction on how to include the student in RPE activities.

Paraprofessional Assists Student. Some students have disabilities (e.g., medically fragile conditions) that require the support of a paraprofessional or parent. A trained paraprofessional or parent can be assigned to assist the student during RPE. Following the plan designed by the APE specialist, the paraprofessional would help the student to participate in regular activities with modifications or alternative activities that may be safer or more beneficial for the student.

Level 3: APE Specialist Provides Direct Service

Additional support beyond consultation is sometimes needed to ensure the successful inclusion in RPE of students with more severe disabilities or those with mild/moderate disabilities who are placed in very large RPE classes. In these cases the APE specialist comes into RPE once or twice a week to team-teach with the RPE specialist or to provide one-on-one assistance to the student with disabilities. In team teaching, the class is split so that the student with disabilities and several without disabilities have P.E. with the APE specialist while the remaining students have P.E. with the RPE teacher. This model allows

disabilities in smaller groups. The student with disabilities is still integrated into RPE but is given direct service by the APE specialist.

In one-on-one teaching, the APE specialist provides direct instruction to the student with disabilities while the RPE teacher teaches his/her regular class. The APE specialist can modify activities as needed so that the student with disabilities is participating with his/her nondisabled peers in similar activities. When the regular program is inappropriate, the APE teacher can provide specialized instruction to the student off to the side but still within the regular physical education environment. During other RPE periods when the APE specialist is not there, a peer tutor or paraprofessional can be assigned to assist the student. Assistance can be in the form of a peer tutor watching out for the student, a peer tutor assisting the student, or a paraprofessional assisting the student. In Level 3, part of the APE specialist's responsibilities is to train the peer tutor or paraprofessional to appropriately modify RPE activities or to substitute alternative activities as needed.

Level 4: Part-time APE and Part-time RPE

The vast majority of students can be served successfully in Levels 1 through 3. However, when full-time RPE is not appropriate for a particular student, adapted physical education may be appropriate on a part-time basis. Part-time APE may be determined on a weekly or unit basis (flexible schedule) or may be planned for a certain period each week throughout the year (fixed schedule). The choice of a flexible or fixed schedule will depend on the needs of the student and the organization of the RPE program. Regardless of the type of schedule, nondisabled students will participate in adapted physical education activities through a "reverse mainstreaming" approach. The importance of including nondisabled peers is threefold. First, it ensures that students with disabilities continue to have an opportunity for social interactions with nondisabled peers. Second, it ensures that students with disabilities are learning age-appropriate and functional skills (Hunt, Goetz, & Anderson, 1986). Third, it ensures that students with disabilities are learning skills in a natural environment that promotes generalization to integrated settings (Brown et al., 1983).

In addition to the inclusion of nondisabled peers, adapted physical education should focus on community based training in lifetime recreation/fitness skills such as swimming at the local YMCA, aerobic dance at a local health club, or bowling at the local bowling alley. The inclusion of community based recreation/fitness training is most important for secondary students who are transitioning from school to community programs (Brown et al., 1979; Brown et al., 1991). As is the case in the previous levels, support can be provided in the form of peer tutors, volunteers, or paraprofessionals.

Level 5: Reverse Mainstreaming

Although many children with disabilities are placed in regular education schools, special education schools (both day and residential) still exist. As argued above, there are many benefits to integrated programming. Therefore Level 5 has been developed to ensure that students who attend special education schools have the opportunity to receive part of their physical education program with nondisabled students. Three methods can be used in Level 5 with varying amounts of support provided at each level to ensure success:

1. *Students with disabilities from the special education school go to regular school for physical education.* An entire class or certain students from a special education school can go to a regular school once or twice a week to receive part of their physical education program. Students from the special school should be placed in regular physical education classes which include nondisabled students of approximately the same age. Whenever possible, no more than two or three students with disabilities should be placed in the physical education class. The class can be team-taught by the adapted and regular physical educators, and support from peer tutors, volunteers, or paraprofessionals can be provided to any student who needs assistance. Due to transportation concerns, this level is most effective in special schools that are close to regular schools. This level may not be appropriate for students who are medically fragile or who have severe behavior disorders that limit their ability to leave a particular setting.

2. *Students without disabilities come to the special education school.* For students who are medically fragile or who have severe behavior disorders, an entire class or certain students from a regular school can come to the special education school once or twice a week for part of their physical education program. Following the reverse mainstreaming approach, students with and without disabilities participate together in age-appropriate activities that are modified so that all can participate in a safe, challenging, and success-based setting. Support can be provided by peer tutors, volunteers, paraprofessionals, or teachers to help any student who needs assistance. The class can be taught by the APE specialist or co-taught by the APE specialist and the regular physical educator. Besides the benefits this level affords to all students, the adapted physical education specialist would gain a better understanding of typical behaviors, interests, and skills of nondisabled children.

3. *Students with and without disabilities meet at a community based recreation facility.* For students of high school age and those with severe disabilities, special education often focuses on preparation for adult life in the community. As such, much of the education they receive is in real-world settings such as places of employment, stores, and community based sport and fitness facilities. This level encourages students with and without disabilities to learn together how to access community based sport and fitness facilities for part of their physical education program. Small groups of students from the regular and special school meet at local sport or fitness facilities such as swim centers, health clubs, bowling alleys, racquet clubs, or YMCAs. Under the guidance of the adapted physical education specialist, students learn how to participate safely and successfully in the activities offered at these facilities. Gradually the staff at the community based facility could take over major supervision responsibilities. Again, support can be provided to individual students in the form of peer tutors, volunteers, or paraprofessionals.

Conclusion

The concept of least restrictive environment has been debated ever since it was defined by PL 94-142. Unfortunately, these debates have not led to any new approaches to the traditional continuum of physical education options. Although Grosse's newest model of LRE options in physical education is a great advancement from previous models, it still fails to eliminate the most restrictive

ends of the continuum. As long as these models continue to place full-time adapted physical education in regular schools, special schools, or in residential facilities as viable options on the continuum, students will be placed in these options. In addition, students will no doubt be placed in these more restrictive options based on categorical labels, particularly those with more severe handicaps, rather than based on what is best for them (Snell, 1988; Taylor, 1988).

For example, Snell (1988) suggested that the percentage of "pull-out" or separate programs for students with severe disabilities is essentially 100%. Similarly, the recent LRE/PE report by Jansma and Decker (1990) found that only 22% of state education agencies (SEA) and 28% of local education agencies (LEA) had any type of entry or exit criteria for placement in adapted physical education. Many placement decisions apparently are based on categorical label rather than on any systematic decision-making process (Grosse, 1991; Snell, 1988; Taylor, 1988). Many school systems make no attempt to place some students with disabilities in regular physical education. In deference to the law, decisions are often based on (a) type and severity of disability, and (b) what resources are available (e.g., availability of an adapted physical education specialist, equipment, or facilities).

The proposed RPE model in which there is a continuum of support allows all students with disabilities, including those with severe disabilities, to receive safe, beneficial, and successful physical education within the regular physical education setting. Grosse (1991, p. 44), in arguing against mainstreaming all students with disabilities into regular physical education, suggested that adapted physical educators should examine the goals of physical education for students with disabilities. She suggested the following three global goals: (a) Each student should have opportunities for optimum growth and development of knowledge, skills, and attitudes in specific disciplines of physical education; (b) participation in physical education should complement the total educational process for each student with disabilities; and (c) the total educational system should be flexible enough to allow physical education services to special-needs students to be provided in a manner that meets the needs of each student.

We support Grosse's global goals for physical education for students with disabilities; however, we argue that these goals can be met more effectively in regular physical education settings (given proper support provided to each student) rather than segregated settings. Only in regular physical education can students with disabilities develop the knowledge base and attitudes needed for participation in integrated, community based recreational activities. Only in regular physical education can students with disabilities learn a variety of skills, including appropriate behavior and social skills, that will complement the total educational process as defined by teaching students to function as independently as possible in their community. Only in regular physical education can the environment be flexible enough to provide opportunities for interaction with a heterogeneous group of peers while at the same time providing an opportunity for individual instruction.

The proposed RPE model, which is currently being field tested and validated, delineates levels of support that may enable students with disabilities to participate in regular physical education with their nondisabled peers. It should be noted that this model may have an impact on the case loads of APE specialists. In some circumstances the opportunity to consult as opposed to providing direct

service would allow some APE specialists to serve more students with disabilities than they currently serve. On the other hand, this model also requires more one-on-one support compared to traditional homogenous group instruction, particularly during the early stages of integration when regular physical education teachers may not be comfortable serving students with disabilities. In situations in which an APE specialist must provide one-on-one direct service to several students who may be placed in different RPE classes in different schools, his/her case load would have to be reduced. Ideally, school districts would fund more APE specialists, at least as part-time employees. In either case, adjustments to case loads should be expected when this model is implemented.

Also, this model will require APE specialists to learn new skills. First, they will need skills in consultation and collaboration. The role of consultant is a reality today for many APE specialists, and effectiveness in this role requires learning the nuances of interacting and communicating with other professionals. The proposed model will only be successful if APE specialists learn to be skillful consultants. Second, APE specialists will need skills in procuring and training volunteers, peer tutors, and paraprofessionals to work in RPE settings. Procuring and training support personnel can be difficult and time consuming, but it is essential if this model is to be effective. Some successful methods for procuring and training peer tutors have been reported in physical education (Long et al., 1980), recess (Passentino & Cranfield, 1991), and regular education (Milligan, 1991). Without trained and enthusiastic support personnel, this model will not work.

Finally, APE specialists will need to learn about RPE including age-appropriate curriculums, expected behaviors, and related skills (e.g., locker-room skills). While a knowledge base of specific disabilities and individualizing programs will continue to be important, an understanding of RPE curricula and expectations of students without disabilities in RPE will be equally as important. Without a working knowledge of what happens in RPE, it will be extremely difficult for the APE specialist to successfully modify activities and to integrate students with disabilities.

Special education is moving away from special schools and even special classrooms. The 13th Annual Report to Congress on the Implementation of Individuals with Disabilities Education Act (U.S. Department of Education, 1991) reports that 93% of the 4,200,000 children with disabilities receive their education in regular school settings. Only 7% are served in special schools or facilities. The watchword today in special education is "supportive schools" (Stainback & Stainback, 1990), in which all students receive their education in their home schools and in regular classrooms with support provided to help them succeed. Adapted physical education specialists must likewise adjust how we deliver physical education services to students with disabilities. It is time to let go of the continuum of LRE options in physical education and adopt a continuum of support to regular physical education.

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