

DISCOVER INCLUSIVE PHYSICAL EDUCATION

A GUIDEBOOK FOR EDUCATORS

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National Center on Health, Physical Activity and Disability
4000 Ridgeway Dr.
Birmingham, AL 35209
www.nchpad.org
800-900-8086
email@nchpad.org

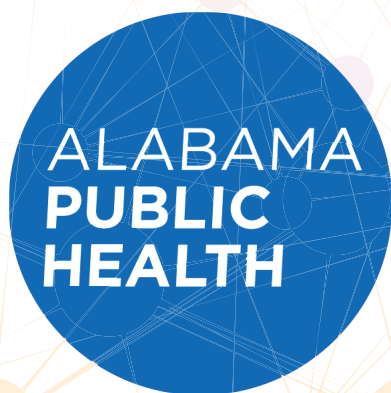


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INTRODUCTION

The goal of inclusive physical education is not only to abide by the law, but also to provide and promote a successful learning environment that fosters a lifetime of healthy habits and sports participation for students with and without disability. Our goal is to provide you with a “playbook” to help you create such an environment for all of your students, regardless of ability level, by providing appropriate assessment tools, games, and inclusion strategies to help you improve your teaching methods and implementation processes. As with all good playbooks, this one provides the key elements for a winning performance as it provides clarity of laws, knowledge on specific disabilities, assessment tools, and sample classes and activities. We also hope that you will find practical solutions for everyday activities.

The benefits of exercise, physical activity, and sport participation are the same for all youth, regardless of ability. Proper training, disability knowledge, and an understanding of inclusion will pave the way for equal access to physical activity for youth, and it starts with you. Physical activity is key in addressing the obesity epidemic, which is especially problematic for individuals with disability. According to the National Health and Nutrition Examination Survey (NHANES), “Obesity rates for children with disabilities are 38 percent higher than for children without disabilities.” According to Dr. James Rimmer, Director of the National Center on Health, Physical Activity and Disability (NCHPAD), “Inclusion in athletics is how children learn from each other, build social skills and optimize their growth and development.” Therefore, it is obvious that physical education can play a major role in children’s lives, both now and in the future. You can help shape these lives now by helping your students become active and independent, which can translate into them becoming active, independent adults.

**“INCLUSION IN ATHLETICS IS HOW CHILDREN LEARN FROM EACH OTHER, BUILD SOCIAL SKILLS AND OPTIMIZE THEIR GROWTH AND DEVELOPMENT.”
-DR. JAMES RIMMER**

The Physical Activity Guidelines Midcourse Report: Strategies to increase Physical Activity Among Youth talks about enhanced physical education, stating that it can increase both the amount of time students are active during class and their physical fitness levels. They define enhanced physical activity as:

- Increasing the amount of time students spend engaging in moderate to vigorous physical activity
- Adding more physical education classes to the curriculum
- Lengthening the duration of current physical education classes
- Meeting the physical activity needs of all students, including those with disability

Some of these components, like class time and student-teacher ratios, are outside of physical educators' control. However, there are other aspects that educators do have control over, such as the intensity level of classes, as well as meeting the physical activity needs for basic health of all students. This playbook will equip you with the tools and strategies needed to make those achievable aspects a reality.

“INCLUSION IS THE PRACTICE OF ENSURING THAT EVERY INDIVIDUAL IS SAFELY AND SUCCESSFULLY INTEGRATED INTO AN ACTIVITY THROUGH MODIFYING THE ENVIRONMENT TO MEET INDIVIDUAL NEEDS.”

**-LISA HILBORN
CERTIFIED ADAPTED PHYSICAL EDUCATOR**



DISABILITY KNOWLEDGE

Full inclusion begins with you, the physical educator, and a basic understanding of disability, which starts with person-first language. Using out-of-date phrases or language that may be perceived as offensive can make any educator seem ignorant and unprepared to work with a student or students with disability. Using proper terminology may go a long way in effectively interacting with both students and their parents.

In general, always put the person first. A person who has a disability is not “wheelchair-bound” or “handicapped.” Instead, he or she is simply a “person who uses a wheelchair” or a “person with a disability.” Here is a brief list of some person-first terminology to use when talking with or about individuals with disability. You can find additional resources at www.nchpad.org

WORDS TO SAY

Person who has...

Person with a disability

WORDS TO AVOID

Suffers from...

Disabled, handicapped, physically challenged

Person with an intellectual disability

Person with a brain injury

Person who has diabetes

Person who uses a wheelchair

Person with epilepsy/ diabetes

Person who has had a stroke

Mentally retarded

Brain damaged

Suffers from diabetes or diabetic

Crippled, wheelchair-bound, confined

Epileptic, diabetic

Stroke victim



COMMUNICATION TIPS

There are other important factors to consider in promoting full inclusion in a physical education class. Here are some tips for communication with students with disability.

- Always treat students with disability with the same respect as students without disability.
- Speak directly to the student, rather than to a parent or para-educator.
- Establish an open communication about the student's abilities and limitations.
- Do not be afraid to ask questions.
- Do not assume the student has additional disabilities just because you can see that they have one. For example, do not assume an individual has an intellectual disability just because they have a physical disability.
- Offer alternative choices only when appropriate; do not over-adapt.
- Do not mistake a disability for a serious disease or illness; students with disability are not going to "get better."
- Do not be afraid to seek out additional help if you do not know enough about a certain disability.
- If necessary, allow extra time for students with disability to respond to your questions and ask questions of their own.
- Never assume you know everything about a disability; every individual is unique.
- Avoid condescension by giving additional praise or undue attention for accomplishment of simple, everyday tasks.
- Do not portray disability as a negative.

INDIVIDUALS WITH PHYSICAL DISABILITY

There are a wide range of causes and degrees of physical disability. As such, it is critically important to always consider the ability level of each individual. One child who has spina bifida may have none of the same characteristics as another child who also has spina bifida. Consider first that each individual is unique, independent of similar disability conditions.

Inquire directly with a student before moving his or her mobility device. Additionally, ensure others do not play with the device. As the potentially only means of ambulation for the student, it is important that it is accessible whenever it is needed.

Certain disabilities predispose some individuals to latex allergies, some of which can be very serious. Some activity equipment may contain latex, and care needs to be taken to provide latex-free options. Examples of such equipment include exercise





bands, gripping tape (for tennis racks, baseball bats, etc.) and balloons.

Regardless of age, you may need to consider using the basic concepts of progression with different sports. For example, if your student is unsuccessful connecting a bat with the ball, you may want to consider using a larger bat, putting the ball on a tee or using a larger ball that travels more slowly, like a beach ball.

INDIVIDUALS WITH INTELLECTUAL DISABILITY

Be aware that an intellectual disability may not be apparent. Before you place unrealistic expectations on a student, check his or her paperwork or ask his or her parents if you have concerns.

Consider how you present information on a daily basis. If it is only spoken once to a crowd of students it may be challenging for some students to comprehend. Be sure to provide directions

in alternative formats, such as in simple step-by-step order using words and pictures.

Along those same lines, make sure that students fully understand the task you have asked them to complete. They may have a desire to please you and therefore say yes or not acknowledge that they do not understand an activity.

When learning a new task, be sure to provide all students sufficient time to learn it. Some students may be significantly slower learners than others, and multiple repetitions may be required. Additionally, some students may demonstrate a poor kinesthetic sense, which could create problems with their balance and gait, particularly when performing new, more detailed tasks.

INDIVIDUALS WITH SENSORY OR COMMUNICATION DISABILITY

If a student has difficulty speaking, do not assume he or she has an intellectual disability, too. Do not alter your own speech or attitude when speaking with a student with such a disability or condition.

Be sure to allow sufficient time for communication. Do not attempt to finish his or her sentences or provide words before he or she



can say them. If you do not understand the student, ask him or her to repeat the question or statement. He or she is most likely just as frustrated as you with the breakdown in communication. Again, be patient and allow as much communication time as is needed.

A student with vision loss can have varying degrees of sight, and may or may not use an assistive device. Help the student become familiar with the environment. Be very descriptive to help orient him or her to the new surroundings. Be sure the environment is safe by removing any unnecessary cones, signs, or other potential obstacles.

A student with hearing loss may require an interpreter. If not, be sure to provide a clear view of the mouth of any speaking individual so the student can read his or her lips. When speaking, be sure to keep your hands and other objects away from your face, and use normal speed and tone.

If communication is difficult, regardless of the disability, consider writing out your message or asking the student to write out or otherwise illustrate what he or she is trying to communicate.

LAWS AND GUIDANCE

There are three main pieces of disability rights law and guidance that directly relate to and/or affect physical education:

- Section 504 of the Rehabilitation Act of 1973
- Office for Civil Rights (OCR) Dear Colleague Letter: Students with Disabilities in Extracurricular Activities
- Individuals with Disabilities Education Act (IDEA)(includes Individualized Education Plans(IEPs))

It is important to be aware of all three and the implications they have on your classroom.

Section 504 of the Rehabilitation Act of 1973 states that “no qualified individual with a disability in the United States shall be excluded from, denied the benefits of, or be subjected to discrimination under” any program or activity that receives Federal financial assistance. Section 504 covers every student with a disability. Often, students who use a wheelchair but do not have any other limitations will fall under section 504. Simply stated, this law stipulates that whatever is provided for students without disability must also be provided for students with disability. If students in your school are provided physical education classes, then students with disability must be provided with a physical education class as well. As stated, this law applies to all schools that receive Federal funding. There are very few schools, including private schools, that do not receive some form or forms of Federal financial assistance; therefore, almost all schools are required to comply with this law.

The **Office of Civil Rights (OCR) Dear Colleague Letter** does not specifically speak to physical educators; however, it affects athletic opportunities in all schools and may affect the goals and outcomes for some of your students. On January 24, 2013, the OCR issued a Dear Colleague Letter clarifying schools' obligations under the Section 504 Rehabilitation Act of 1973 to provide extracurricular athletic opportunities for students with disability. The release of the Dear Colleague Letter is not a new law but rather further guidance on what should already be provided for students with disability under Section 504. The purpose is solely to clarify schools' responsibilities under the law and does not provide any additional legislation. Similar to Title IX, which paved the way for women to have equal opportunity in sports, the further guidance will hopefully lead to similar outcomes for student athletes with disability.

The **Individuals with Disabilities Education Act (IDEA)** requires public schools to make available to all eligible children with disability a free, appropriate public education in the "least restrictive environment" alongside their peers without disability as is appropriate to their individual needs. Least restrictive environment is defined by the law as:

"to the maximum extent appropriate, children with disabilities... are educated with children without disabilities, and that special classes, separate schooling, or other removal of children with disabilities from regular education environments occur 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." Federal Register, August, 1977, p. 42497

As a physical educator, it is incumbent upon you to ensure that a student with a disability will not be functionally excluded from your class or asked to do something different than the rest of the class due to the disability. An example of functional exclusion may be assigning the student with the disability to keep score while all other students are playing a game, or to play in the corner with his or her back to the court instead of playing with other students. It is your charge as their physical educator to learn about and create opportunities for play in the least restrictive environment possible.

An **Individualized Education Plan (IEP)** is a legally-binding document that has been tailored specifically to a child's educational needs, including his or her physical education needs. An IEP should state specific goals and objectives for physical education as delineated in the student's IEP meeting, which involves parents, teachers and other professionals. As the physical educator you should be present in that meeting and take part in the discussion by suggesting accommodations that are age- and ability-appropriate. This will help provide a

safe, successful, beneficial environment for the student.

Unfortunately, it is common for physical educators to not be present at IEP meetings; however, that does not make the plan any less binding. If you are presented with an IEP, it is imperative that you read through it and make sure that the suggested accommodations are possible before signing off on it. An IEP could be presented to you stating you will spend 20 minutes of individualized teaching time with a student during each class. This may be completely impossible as you may be the only educator for 50 students during that time, in which case you should refuse to sign unless changes are made. Be sure to know your rights as a physical educator and make sure you have a say in the IEP of each of your students. Parents may not know or be willing to advocate for their child to receive an IEP for physical education; as the physical educator, you may be that student's biggest advocate.

“THE IEP SHOULD BE THOUGHT OF AS A MANAGEMENT PLAN BASED ON ASSESSMENT RESULTS AND PUT IN PLACE TO IDENTIFY SPECIFIC OBJECTIVES FOR THE STUDENT WITH A DISABILITY WITHIN THE LESSON PLAN.”

Individualizing an IEP is of utmost importance to the safety and success of the student. Ensuring that IEPs are tailored specifically to meet each individual student's needs in the least restrictive environment must be a primary consideration. IEP goals should also include life skills whenever possible. For example, transferring safely and independently should be a goal for most students who use wheelchairs. Performing this skill correctly and safely may not be known by many physical educators; however, that does not mean that this skill can be overlooked, as it will be a vital component of lifelong independence for students who use wheelchairs. It is the instructor's responsibility to educate his or herself on proper and safe transfer techniques so that he or she can pass that knowledge on to his or her students.

Assessment

In order to write a proper IEP with appropriate goals and objectives, there must be an assessment process involved. An assessment will not only help write the IEP, but will also provide the means to create good and purposeful lesson plans with objectives that will target your student's strengths and weaknesses. The pre-IEP assessment needs to include physical testing of motor performance, as well as verbal inquiry regarding background, disability awareness, your student's personal goals and the feasibility of accomplishing those goals.

Motor performance:

- Does your student have the same basic skills as his or her peers?
- What skills are weakest?
- What skills are strongest?
- What skills does he or she need to work on most to improve independence?

Background

- What type of physical education system is he or she coming from?
- Is he or she currently involved in any physical therapy?
- Has he or she participated in any school sports or recreational programs?

Disability Awareness

- How long has he or she been injured or had his or her disability?
- Is he or she knowledgeable about his or her disability?
- Has he or she been encouraged to be independent or to depend on others?
- Is he or she aware of any possible complications associated with his or her disability (e.g., pressure sores, brittle bones, overheating)?

Personal Goals

- What are his or her personal goals for sport and recreation? For example, does he or she simply want to start playing a sport, like power soccer or wheelchair basketball, or is the goal to train hard enough to become a Paralympian?
- Does he or she want to be more independent (e.g., transfer him or herself, play with friends on the playground or in sport)?
- Are there environmental barriers that are preventing him or her from achieving these goals?
- Are there opportunities in your area to help him or her achieve these goals (e.g., an adaptive sports team or league)?
- Has he or she been “sheltered” to the point of not knowing what appropriate goals could be?

Through this thorough assessment process you should be able to write clear, individualized goals and objectives for each of your students. You are also now equipped to be a vital component of your students' IEP processes.

One final note: assessments should be ongoing throughout the year. Continually assessing your students through play and other activities allows you to monitor your students' independent goals and objectives and change them if necessary.

Writing an IEP

An IEP should start with the above-discussed assessment of student performance. It should also include speaking with the student's parents. Once those steps have been taken, you are ready to write the IEP.

An IEP includes three basic components:

1. Present Level Statement
2. Annual Goal
3. Short-Term Objectives

The present level statement is based on the current level of performance of which the student is capable. The present level statement should always be a positive statement depicting what the student is capable of; it should never denote what they cannot do.

Example: John was able to complete one half of the one mile run using his everyday wheelchair.

The annual goal is one that should be met by the end of the year. The annual goal should include measurable and attainable large scale goals.

Example: John will improve his aerobic functioning by being able to complete the one mile run in his everyday wheelchair.

The short-term objectives should be written to help you reach the annual goal and improve the student's present level. Short-term objectives should also be measurable so that you can gauge how your student is progressing.

Example: John will use his every day wheelchair to complete three quarters of the one mile run in under 10 minutes.

Sample IEPs

Component

Present Level Statement

Annual Goal

Criteria

George is able to throw a regulation softball overhand five out of five times.

George is able to throw a regulation softball overhead stepping with opposition and finishing with a full extension follow through five out of five times.

Short-Term Objectives

1. George is able to throw a regulation softball overhead stepping with opposition four out of five times
2. George is able to throw a regulation softball overhead stepping with opposition and finishing with full extension and follow through four out of five times.

IMPLEMENTING A PLAN FOR SUCCESS

Teaching a class and finding activities for multiple disabilities can be challenging; you have to do your homework. You will need to determine what type of class design, teaching format, and models you will want to use. Whatever class design and teaching format you choose should help all of your students reach their goals and objectives for your class.

When choosing a class design and teaching format you must consider everyone in your class, regardless of their ability levels. Therefore, before you can choose an appropriate class design or teaching format, you need to know some basic information on different disabilities and some associated contraindications.

PHYSICAL AND SENSORY DISABILITY

- Every person and disability is unique.
- Having a disability can indicate a wide array of conditions. Do not assume ability levels based only on mobility devices.
- Create a skills list at the beginning of the year so you know what students are capable of and where you want them to go. Be sure to include life skills, like transferring.
- Make sure that the reward system you have in place is appropriate for the disability. Physical disabilities alone do not require the same type of rewards as



intellectual disabilities.

- Do not expect too little of your students with disability. Sometimes it is not permissible for them to simply quit or not try something. What you expect out of them will become what they expect out of themselves. Do not set the bar too low.
- Do not allow your own lack of knowledge to limit your students.
- The more active your students are, the more independent they will be throughout their lifespans.
- Try to do as little adaptation as possible.
- Do not be afraid to get some students out of their wheelchairs. This will help them engage muscles they do not utilize on a regular basis.
- Do not be afraid to challenge them, as they may have never been physically challenged in their lives.
- Loud noises can negatively affect some students who have cerebral palsy, spina bifida and other conditions. Whenever possible, try to avoid actions and activities that require loud noises.
- Be sure to give them extra time to complete tasks if necessary.

INTELLECTUAL DISABILITY

- Students with intellectual disability, particularly those on the autism spectrum, may flourish in a very predictable environment. Try to make your class as predictable as possible. For example, you could start and end every class with the exact same warm up and cool down.
- A large gym or field space can be very overwhelming for some students. To avoid this, divide the space into several unique stations for a variety of activities.
- Some of these students may easily lose focus, get off task, or become fixated on one thing. To help combat these issues, you may want to post a schedule where they can see it, give them a picture book of the day's activities, and/or have a video playing or a para-educator there to provide a constant reminder of each task at hand.
- Providing a schedule or book of the day's activities may also help reduce some of the anxiety regarding the unknown.
- The main objective in a physical education class should be for the student to be active. However, sometimes a student may have to remove him or herself from an over-stimulating environment and go to a safe place. Be sure their safe place still involves some sort of physical activity, such as a stationary bike, treadmill or arm bike.
- Make sure the safe place is always visible to them and/or that they know where to locate it.
- Color code! It may very helpful to familiarize your students with "their" color. That way, whenever working on a new skill they will know, for example, that the red ball is theirs, or that they should line up behind the red line. This will help them quickly identify where they belong and what they should be doing. Color coding can be used for equipment, stations and directional movement (e.g., follow the red



cones).

- There may be situations in which the least restrictive environment for the child to succeed is working one-on-one with his or her para-professional. However, to ensure social interaction and inclusion, try to structure your class so that this instance does not require the entire class period.

- Always be prepared with an appropriate rewards system for the students. Make sure the rewards do not take away from the end goals or objectives. For example, the reward for trying a new activity for a certain amount of time might be getting to do an activity that they enjoy at the end of class.

- Goals and objectives for these students should include skill learning and regular physical activity, just like other students.



With these strategies in mind, you should be able to pick appropriate teaching styles and class formats; it is important to note that you do not have to use only one teaching style or class format. One skill may be taught best using one style, while another skill might work best with a different style. In the next section, you will find activity cards with three different class formats to help you when designing your classes.

ACTIVITY CARDS

The following Activity Cards have been created to provide a wide range of ideas, recommendations, guidelines, and tips for numerous physical activities, games, and challenges. Activity Cards have been created for Zone Games, Stations, and Relays. Each type of activity offers unique benefits and challenges that will keep students engaged, moving, and healthy as they learn and improve their individual health levels and sports skills.



Zone Games

When playing games on a court or field, you can divide the playing area into zones to add multiple levels of inclusion.

- Different zones can be marked for different forms of ambulation.

For example, one zone may be for runners, while another may be for “wheelers,” such as scooter boards, wheelchairs, or rolling office chairs.

- Different goals can also be used.

For example, goals of varying heights and/or sizes.

- Different rules can be implemented to allow opportunities for equal success to all participants.

For example, by limiting the amount of playing time in general and/or in specific zones. You can also implement rules like, “The ball must pass through each zone before attempting to score.”

Zone games may help students with disabilities identify previously-unnoticed skills and benefits. For instance, a student who uses a wheelchair may be able to get down the court faster than anyone else can run and, therefore, shoot without any defenders. Zone games can also be used to help other students in the class who are simply not as coordinated as others by including a zone for them.



Zone Games

Basketball

Application:

The court can be divided into as many zones as is necessary. There can be a zone down the middle and one on each side. The zones on the sides can have the same or differing rules. One zone may be used for wheelers. If there is only one student who uses a wheelchair, other students may play in the same zone using wheeling office chairs. If there are no other wheeling chairs available, everyone in that zone can use scooter boards, including the student who uses a wheelchair.

For older or more advanced students, zones can be used to indicate which hand to shoot with. This may be helpful for students with conditions such as hemiplegia. Other options could be to include both walking and running zones.

The goal may be changed to increase the odds of success of the students playing. It may be necessary to offer one goal at one height and another goal at a different height. One goal may need to be wider than the other to allow for a more successful attempt at making a basket. Make sure that all students are allowed to shoot at either goal. Students with a disability may not be the only students who benefit from a different goal.

Equipment needed:

- Basketball court
- Basketball(s)
- Tape or small cones to indicate zones

Optional:

- Lower/wider goal(s)
- Rolling office chairs and/or scooter boards



Zone Games

Soccer

Application:

Zone soccer can be played with as many zones as necessary to ensure the success of all students. Zones may go the full length of the soccer field or may be divided into smaller sections for students who may fatigue easily. Zones may include wheelers, walkers, and runners, and may indicate kicking with left foot, right foot and/or utilizing the hands.

The goals used in zone soccer can be at the same location and differentiated by cones marking various widths. Each uniquely-sized goal can be given a different point scale. All students should be given the option to shoot at all goals.

Equipment needed:

- Soccer field
- Soccer ball(s)
- Cones or chalk to indicate zones and mark goals

Optional:

- Cardboard to make wheelchair soccer guards
- See “Additional Tips” section for instructions
- Scooter boards or other wheeled items

Zone Games

Hockey

Application:

Divide the court or field into as many zones as is necessary. Zone options may include standing, wheeling, scooting, or running.

Do not allow players or their hockey sticks to pass into another zone. Rules should be added to provide opportunities for equal success in play.

Some examples may include that the hockey puck must pass through each zone before a shot can be taken, that players may only spend a given amount of time in each zone, or that multiple goals of varying widths be included. All players should be allowed to shoot at all goals, regardless of width.

Implement as many standard rules of hockey as possible to keep the integrity of the sport the same.

Equipment needed:

- Hockey court or field
- Hockey sticks
- Hockey puck(s)
- Tape or cones to mark zones
- Goals

Optional:

- Scooter boards, rolling chairs, and/or stationary chairs

Stations

Another way to break up activities is by creating several different stations. Stations provide all students a chance to participate and play together. This can prevent scenarios in which students with disability have to do their own, different activity off to the side while students without disability participate in an activity together. Stations can also help break down specific skills so that all students can learn it as well as possible. Not all students are created equally. Some are lacking in coordination, while others are not. It is likely that some students both with and without disability will struggle with certain skills; stations can benefit all students who may need a further break down of a skill to master it.

Stations can also be used to help keep the class aerobic. When learning a skill, it can be hard to keep students' heart rates up, so you may want to incorporate every other station with a heart-pumping activity. This way, students are still getting some active play while learning new skills.

Color-coding each station can also be a huge help in multiple ways. First, this lets students know where to go next by following their colors. Second, it can indicate the difficulty levels of each station. When students get to a particular station, they can self-select which level of difficulty they would like to try, or you can pre-assign them. This also helps avoid assigning kids to classes or groups so that students who use wheelchairs or other mobility devices do not always have to participate in the "B"-type group.

Always include a cardio warm up and cool down in every class.

Stations can be modified for high- and low-functioning students.

Stations

Jump Rope

Not all children are able to repetitively jump over a rope with grace and coordination. By adding different stations to a jump rope lesson, all kids can benefit from progression.

Cutting a jump rope in half or using split ropes allows students, regardless of ability levels, to perform the motion. This includes wheelchair users and those with poor coordination.

One station could have a trampoline or a large exercise ball that allows all students to bounce up and down.

Putting a line of tape down on the ground at another station provides an activity in which all students to move back and forth over the line. This movement may be in the form of jumping, stepping or pushing a wheelchair back and forth over the line.

Color coding can be used to indicate difficulty level or designate ambulatory versus non-ambulatory.

All children should be allowed to choose their preferred degree of difficulty at each station.

Jump Rope Stations – Divided into groups A and B

- | | |
|--------------------------------------|--|
| 1. A) Bounce on large ball | B) Bounce on large ball near a wall |
| 2. A) Bounce on trampoline with feet | B) Bounce on trampoline with bottom |
| 3. A) Jump over line | B) Push over line |
| 4. A) Jump with a split rope | B) Do arm motion with a split rope |
| 5. A) Jump rope for a given time | B) Split rope movement (may add bounce) for a given time |

Stations

Age-appropriate High-intensity Physical Activities

When designing any exercise station, always separate muscle groups in such ways as:

- *Pushes and pulls*
- *Abs/core and back*
- *Upper and lower body*

High-intensity movements are great because they increase heart rate while working a specific muscle group or groups. Look for and utilize big muscle group moves.

High-intensity exercise can consist of any combination of sets and repetitions. For example, you can use the date, a team score from the last volleyball game, or fifty repetitions. Anything is possible.

Make the station times work for the allotted class period time.

Try to think of fun movements for the students. For example, make a move named after your school mascot or a popular movie character. Naming a move can also be used as a reward or part of a reward system.

Make the transition between stations as quick as possible so that the students are able to keep their heart rates up.

Sample class

- Thirty minute class featuring five minutes of warm up and cool down and 20 minutes of activity.
- For the 20 activity minutes, have students complete 30 seconds of work, then provide 30 seconds to transition to the next station.

High-intensity station examples:

- *Jumping jacks*
- *Push-ups*
- *Cross country ski arms*
- *Planks*
- *Push motions*
- *Front raises*
- *Rope slaps (battle ropes)*
- *Super-mans*
- *Mountain climbers*
- *Lat pull downs*
- *Arm circles*
- *Dips*
- *Wall balls*
- *Bicep curls*
- *Kettlebell swings*
- *Walk outs*
- *Arm punches*
- *Shoulder presses*
- *Medicine ball throw downs*
- *Rowing*
- *Wind mills*
- *Wood chops*
- *Burpees*
- *Snatches/shrugs*
- *Fast clapping*

Stations

Sitting Volleyball

Stations can be used so that all students sit, or so some sit and some stand.

Stations can be modified for high- and low-functioning students.

The use of different weighted balls at each station should be an option for all students.

All students may progress through all stations, or color-coding may be used to help students choose stations that best fit their ability levels.

You should always have at least two students at each station.

While learning volleyball skills, some stations should still work to increase cardiovascular capacity and health. Additionally, always include a cardio warm up and cool down in every class.

Stations

1. Passing a ball into/at a wall
 - a. Standing
 - b. Sitting
 - c. Hitting off cone
2. Shuffle left and right
 - a. Standing in "athletic stance"
 - b. Seated using appropriate sitting volleyball moves
 - c. Moving powerchair from point to point
3. Tethered overhand hitting
 - a. From a standing position
 - b. From a seated position
4. Moving block (mark off an area with tape or use a table top surface)
 - a. Have one student roll the ball while the other moves to stop the ball from rolling out of the surface area or off of the table top
 - b. Have students roll the ball to a specific cone within the marked area or on the table top
5. Arm taps
 - a. Use a weighted medicine ball to keep elbows straight.

- b. Use a lighter ball
- c. Chest pass into the wall

6. Blocking drill

- a. Have students squat down and jump while extending arms straight into the air
- b. Have students perform arm jacks with the top position being a block position instead of a clap
- c. Have student raise and lower their arms repetitively

7. Keep it up

- a. Using a regular ball, have two students work to keep the volleyball off the ground
- b. Using a lighter ball, have two students work to keep the ball up from a seated position on the ground

8. Targeted passing

- a. Have two students pass the ball back and forth to each other
- b. Have two students roll the ball into different targets within a given surface area (e.g., table top)

Other stations may include:

- *Serving into a wall or serving a tethered ball,*
- *Serving over a standard or lowered net*
- *Setting a ball into a wall, to another player, or to a target, and/or*
- *Lunges and push-ups*

Relays:

Relays allow all students to be moving and active together, regardless of their ability levels. Relays can be used as a progression from stations to game play. Once students have learned a skill, they can implement it with a more dynamic transition through relays.

Relays allow students to choose tasks that are strengths for them.

Relays help students stay on task by creating small teams.

Relays also provide an opportunity to implement different aspects of disability sports into a mainstream physical education class.



Relays

Goal Ball

Relay 1—Over-Under

Have students stand arm-width apart in a straight line facing the back of the student in front of him or her. Each student must be wearing blinders. Using an appropriately-weighted ball for the class, have the students pass the ball alternatively over and under to the back of the line and then back to the front. For example, one student will pass the ball over his or her shoulder to the student behind, then that student will pass the ball through his or her legs to the next student and so on. Make sure that all students who are wheelchair users are placed where they will be passing the ball over. Some students may perform this relay better if seated in a stationary chair. As the students' skills improve, implement a timing game in which teams compete to see who can complete the relay the fastest.

Relay 2—Zigzag

Using the same relay teams, have students spread out in a zigzag pattern across the width of a basketball court. With blinders still on all students, have them sit down in place, and have each student roll the ball to the next student in a zigzag pattern, completing the movement all the way down the relay line and back. This game will require silence from the students as they listen for cues on where to pass the ball. This relay may be more successful if each student is given a number they can call out when they have received the ball, are ready to pass, and are ready to receive. Using a ball with a bell or a ball wrapped in a plastic bag may also lead to greater success.

Relay 3—Baseline and Back

Have all students take off their blinders except for one and line up on the baseline of a basketball court. The student with the blinders on must listen to his or her team's directions as he or she runs to the free throw line and back to the baseline. Once that student is back at the baseline, he or she must tag the next person in line, who will then put on his or her own blinders and repeat the task.

Relays

The Four Ps

The Four Ps are: People; Place; Prop; Position

People: *each individual student on a team*

Place: *area of the gym or field they will have to go to*

Prop: *item they will have to take with them*

Position: *mode of locomotion they will use to get there*

Have a list of options for the Four Ps ready for student teams. Tell students they must work together as a team to complete the relay. Each team member must use a different P from each of the four categories. Provide the students with time to strategize who would be the best person for each P. Once the teams have their plans in place, give them a countdown to start and then time the teams to see who finishes first.

*Below are multiple options for each **P**.*

People: *Each individual student team member.*

Place: *Locate different areas around the gym or field. You might use a goal post, doorway, or basketball goal. You could also set up different cones and number them to establish different areas.*

Prop: *Props could include a basketball students have to dribble, a soccer ball they have to dribble with their feet, or a goalball and blinders (another team member will have to shake the goalball to assist the team member in knowing where to go).*

Position: *Students may have to run, skip, push a chair (wheelchair or rolling office chair), and/or use a scooter or scooter board to ambulate from position to position.*

Relays

Soccer Ball

Relay 1: Have students dribble a soccer ball from point A to point B and back. Students can dribble using their feet, hands, front of wheelchairs, or with soccer guards placed on the front of chairs.

Adaptations:

- Change the size, weight, or color of the ball used
- Adjust the length of the relay for each group
- Provide an activity for other students when it is not their turn, such as push-ups

Relay 2: Have students dribble a soccer ball through cones for a given distance and then pick up the soccer ball and sprint back to the line.

Adaptations:

- Change the distance between cones for individuals who use a wheelchair or who are not as coordinated
- Adjust the length of the relay
- Change the size, weight, or color of the ball used



CLASS DESIGN

When designing your inclusive physical education class it is important to remember that the different stages of learning still apply for people with disability. For example, if a student has trouble connecting a bat with a ball, he or she may need a bigger bat or ball or a stationary target. Work through those same progressions with all of your students. The most important part of your class design is to make sure that all of your students are enjoying some degree of success. Success gives them the encouragement they need to keep trying and helps improve the way they feel about themselves.

The reason to adapt any exercise is to make sure all students have some degree of success by eliminating or at least diminishing the disadvantages caused by the environment. As previously stated, all modifications should start out minor and be considered temporary. Any modifications used should be reviewed and changed as needed on a regular basis. Along those same lines, not only do you not want to over-modify, you also do not want to lose the integrity of the game you are playing. For example, basketball, in essence, should still be basketball, and should be easily identifiable as such.

The TREE model was designed to help modify or adapt any activity to make it more inclusive. TREE stands for: Teaching style; Rules; Environment; Equipment.

TEACHING STYLE
RULES
ENVIRONMENT
EQUIPMENT

Teaching style:

Teaching style is the way in which an activity is delivered to a class, and has already been addressed in this guide to a degree. The style in which you choose to teach can have a big impact on how well an activity is understood by and implemented for all of the students in your class. Below is a list of tips that can help when considering teaching styles.

- Know all of the students in your class
- Use demonstration and visual aids whenever necessary
- Be sure all students can see and hear demonstrations and instructions
- Use language that all the students can understand
- Keep instructions and teaching commands short
- Check with students to make sure they understood all lessons and instructions
- Consider use of a buddy system or accountability partners to help the flow of class

Rules:

The rules of any game can be changed to give students a greater opportunity to experience success.

Rules can also be modified or reintroduced as the students' skill levels increase. Here are some examples of rule changes to consider:

- Allow more bounces or steps to be taken, or allow for a bounce to be taken when normally there is none, like in volleyball
- Allow more hits than normal
- Allow more or less players to occupy a space
- Allow more substitutions
- Allow substitute runners
- Allow changes in time restrictions, like shot clocks
- Allow a reduction in the competitiveness of the game

Environment:

The environment includes everything from the length and height of the playing area to the amount of distance traveled to get there. It also includes the surface of the playing area, whether indoor or outdoor, and how the student is positioned on it, whether seated or standing. Here are some suggestions for modification:

- Increase or decrease size of the playing area
- Change an outdoor grass activity to an indoor court activity
- Lower height of goals or nets in sports like basketball and volleyball
- Make use of zone games
- Minimize distractions to help keep students on task

Equipment:

Equipment modifications include everything from the size and shape of balls to the color, texture and weight of playing implements. Here are some example modifications that can be made to equipment:

- Consider changing weight of equipment to be either lighter or heavier
- Consider using different balls (lighter, bigger, slower, audible (e.g., bell(s) inside, wrapped in plastic, etc.)
- Consider using equipment that is easily visible against the playing area

ADDITIONAL TIPS

Here are some ways to adapt your equipment or activities to make them more inclusive. Many times, these will be low- or no-cost adaptations. Also included is a list of adapted equipment items and where you can purchase them.

Jump rope: for a student who uses a wheelchair or any student who cannot successfully jump rope, cut a jump rope in half and tie knots at the ends. You can also add a slight counter weight at the ends to help with rotation of the rope. A few companies (listed in “Adapted Equipment Resources”) also make a similar product. You can find a list at the bottom of the page.

Soccer: allow students who use a wheelchair to use a tennis racket to “kick” the ball.

Soccer guard: for students who use a wheelchair (everyday, sports, or powerchair), a simple guard can be made to fit on the front of the chair so it can “kick” the ball. To make the guard, all you need is sturdy cardboard and duct tape. Bend the cardboard to fit the outside of the footplate, resembling three sides of a square box. Then, duct tape the guard onto the front of the chair using the front bars of the chair.

Ball sports: for students with visual impairment, keep a stash of plastic bags around to use to wrap balls in so that the student can hear the crinkle in/of the bag and play along. There are also different balls with bells or beeping mechanisms in them (listed “Adapted Equipment Resources”).

Scooter boards: for students who use a wheelchair or for students who take longer to get from one place to another, such as when moving from station to station, use scooter boards to facilitate quicker mobility. Scooter board providers are listed in “Adapted Equipment Resources.”

FITNESS TESTING: ADAPTING THE ALABAMA PHYSICAL FITNESS ASSESSMENT

AEROBIC CARDIOVASCULAR ENDURANCE

One Mile Run

Objective: to stay as close to the recommended testing protocol as possible for each individual student

Equipment: stopwatch, known measured and marked distance

Optional equipment: guide rope, guide runner, arm bike, ping pong ball, slalom course

Resources: One Mile Run adapted demonstration video

Testing Tips:

Provide clear instructions for the testing procedures. Allow ample opportunity for students to process testing procedures and practice the test. Provide continual encouragement for students that require it to remain at the fastest speed possible for the duration of the test. Always provide a warm up and cool down, realizing that some students may require additional warm up and cool down times.



Accommodations:

For runners with a visual impairment, provide a guide runner and rope. The tether is held in the hand of the guide and the student with a visual impairment. Encourage the guide runner to keep the pace of the student runner.

Also consider peer-assisted runs, in which another student or aid runs beside a student to provide continual reminders and/or directions while running to encourage a constant speed.

Allow students who use wheelchairs to perform the test in a ball chair or racing chair. Have the students perform the full distance whenever possible. Make sure that the course is on a level, hard, smooth surface.

If any student cannot complete the entire distance, have him or her run or push a predetermined distance and measure for time.

If a student uses a powerchair but has appropriate functional capabilities, allow him or her to go a predetermined distance using a scooter board or any other mobility device or means.

Provide a student with an arm bike or hand crank to complete the test.

Allow students to use any continuous movement possible, such as arm jacks or arm circles. Measure the time the movement is continuously sustained.

Allow students with very limited function to perform a breath test, such as seeing how far they can blow a ping pong ball.

Provide a slalom course for students who use powerchairs.

Important note: just because a student uses a powerchair does not necessarily mean that he or she should not complete the given test. Studies have shown heart rate increases for powerchair users completing a given course. The main concerns should be battery power and effectiveness of testing.

PACER: Progressive Aerobic Cardiovascular Endurance Run

Objective: to stay as close to the recommended testing protocol as possible for each individual student

Equipment: cones or tape to designate measured distance, means to indicate time by sound (e.g., a beep or horn)

Optional equipment: visual cues to indicate directional turns and time (e.g., signs, blinking lights, interpreter), demonstrated or audible cadence by an adult, guide rope, guide runner, scooter board, arm bike, Airdyne bike

Resources: PACER adaptation video

Testing Tips:

Provide clear instructions for the testing procedures. Allow ample opportunity for students to process testing procedures and practice the test. Provide continual encouragement for students that require it to remain at the fastest speed possible for the duration of the test. Always provide a warm up and cool down, realizing that some students may require additional warm up and cool down times.

Accommodations:

Modify as little as possible. Try to maintain the integrity of the test.

Provide visual cues such as signs, arrows, blinking lights, or interpreters for Deaf students and those with hearing impairments.

Provide a demonstrated or audible cadence from an adult or para-educator for students who easily stray off task. Allow adult or para-educator to perform the test with the student. This may also include hand holding or a guided push when necessary.

Provide a guide rope and guide runner for students with a visual impairment.

Allow students increased time to reach the line or modify the requirement of the cadence.

Modify the course for students who use a wheelchair if they have trouble with 180-degree turns by allowing them to make 90-degree turns.

Allow students to use an alternate means of locomotion including but not limited to scooter boards, crawling, rolling or scooting.

Allow students to use their mobility devices, such as wheelchairs, walkers, gait trainers, and crutches.

Allow students to perform any movement for a given time and increasing cadence, such as arm circles or arm jacks.

MUSCULAR STRENGTH AND ENDURANCE

90-degree Push-ups

Objective: to stay as close to the recommended testing protocol as possible for each individual student

Equipment: cadence keeper, mat, soft object

Optional equipment: raised mat, wall, exercise band, hand held weights

Resources: 90-degree Push-ups adaptation video

Testing tips:

Provide clear instructions for the testing procedures. Allow ample opportunity for students to process testing procedures and practice the test. Provide continual encouragement for students that require it to remain at the fastest speed possible for the duration of the test. Always provide a warm up and cool down, realizing that some students may require additional warm up and cool down times.

Accommodations:

Allow proper positioning with only partial lowering of the body.



Allow a modified cadence.

Allow students to perform push-ups from their knees, or to perform a plank when push-ups are not possible.

Allow students with partial or no function in their lower bodies to perform push-ups off the edge of a raised mat. Require students to go as far off the mat as they are capable.

Allow students to do wall push-ups or chair push-ups using the arms of a wheelchair or stationary chair.

Allow students to perform a chest press motion with either exercise bands or lying in a supine position with hand weights.

ABDOMINAL STRENGTH AND ENDURANCE

Partial Curl Up

Objective: to stay as close to the recommended testing protocol as possible for each individual student

Equipment: cadence keeper, mat

Optional equipment: medicine ball, large exercise ball, incline wedge, foam roller

Resources: Partial Curl Up adaptation video

Testing Tips:

Provide clear instructions for the testing procedures. Allow ample opportunity for students to process testing procedures and practice the test. Provide continual encouragement for students that require it to remain at the fastest speed possible for the duration of the test. Always provide a warm up and cool down, realizing that some students may require additional warm up and cool down times.

Accommodations:

Allow an assistant to hold students' feet down.

Allow students' hands to slide down their thighs.

Allow students to perform a small range of motion.

Allow students to perform negative sit-ups.

Allow an assisted pull to initiate the movement (e.g., a medicine ball or exercise band). This is helpful for students who have limited abdominal function.

Allow a modified cadence.

Allow visual or tactile cues for hand placement.

Allow a rocking motion performed by holding onto the knees and leaning back and forth.

Allow students to hold a para-educator's hands or a stick to provide assistance when necessary.

Provide an incline wedge or mat for added support behind students if necessary.

Allow students to perform a crunch from their wheelchair only if they are unable to safely transfer out of their chairs.

Alternative abdominal exercises to be used by students with little or no abdominal function: walk outs, roll outs, figure 8s, maintaining balance on an exercise ball.

FLEXIBILITY

Back Saver Sit-and-Reach or V-Sit and Reach

Objective: to stay as close to the recommended testing protocol as possible for each individual student

Equipment: sit-and-reach box

Optional equipment: tape, ruler

Resources: Back Saver Sit-and-Reach adaptation video

Testing Tips:

Provide clear instructions for the testing procedures. Allow ample opportunity for students to process

testing procedures and practice the test. Provide continual encouragement for students that require it to remain at the fastest speed possible for the duration of the test. Always provide a warm up and cool down, realizing that some students may require additional warm up and cool down times.

Accommodations:

Allow students to begin with an easy distance, such as touching their knees, and gradually increase the distance.

Allow students to hold position for a shorter amount of time, rest, and then repeat the move.

Place tape marks on the students' legs to serve as a visual or tactile goal.

Measure the maximal range of motion using a ruler or measuring tape for forward trunk bend, trunk rotation, or height of arm.

Be sure to provide a measure of flexibility that is pertinent to the students' functional capabilities. For example, a student with a spinal cord injury and little to no function in his or her hamstrings should perform an upper body flexibility test instead.

Have students who are unable to transfer out of their wheelchairs reach down the sides of their chairs as far as possible. Compare both the left and right sides.

**It is important to note with all adaptations there are no standards available. When recording data it is imperative that you keep excellent records of the test conducted for a given fitness component so that the test can be re-administered at the end of the year and compared to the pre assessment score.*

ADAPTED EQUIPMENT RESOURCES

Equipment:

<http://www.adaptivemall.com/schoolclas.html>

Classroom equipment for students of all abilities:

<http://funandfunction.com/>

Adaptive therapeutic recreation equipment for students:

<http://www.theradapt.com/>

More physical education equipment for kids and youth:

http://www.rehabmart.com/category/Pediatric_Recreation_Products.htm

Recreation equipment:

<http://www.recreativeresources.com/linkadaptiveequipment.htm>

Playground equipment for students and other youth:

<http://www.byoplayground.com/commercial/accessible-equipment.html>

Physical education equipment for kids:

<http://www.flaghouse.com/>

Adapted equipment:

<http://www.especialneeds.com/special-needs-equipment.html>

Active sports equipment:

<http://www.adaptivesportsequipment.com/>

Split jump ropes:

<http://www.power-systems.com/p-4177-airope.aspx>

Goal balls and blinders:

<http://targetinnovations.com>

Power soccer equipment:

<http://www.powersoccershop.com>

Wheelchair softball:

<http://www.adaptivesportsequipment.com>

Books and equipment:

<http://www.pecentralstore.com/>

Equipment:

<https://store.schoolspecialty.com/>

Additional books and equipment:

<http://www.gophersport.com/>

RESOURCES

Alabama Course of Study, Physical Education 2009 Joseph B Morton

Alabama Physical Fitness Assessment –

Test administrator Manual 2011

Australian Sports Commission: Sports ability

<http://www.ausport.gov.au/participating/disability/resources>

Australian Sports Commission Sports Ability activity cards 2

http://www.ausport.gov.au/__data/assets/pdf_file/0010/448606/Sports_Ability_2_Cards.pdf

The Autism Fitness Handbook David S. Geslak 2011

The Autism Fitness Handbook 2 David S. Geslak

CDC (2012). Disability and Obesity. From:

<http://www.cdc.gov/ncbddd/disabilityandhealth/obesity.html>

Project Inspire, Texas Woman's University. Practical suggestions for teaching specific student and teacher physical activities to learners with disabilities.

<http://www.twu.edu/inspire/teacher-to-teacher%20.asp>

Teaching Disability Sport, A guide for physical educators. Ronald W. Davis, 2011

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Alabama Adapted Physical Education and 504 Process State Guidelines, 2014

Australian Sports Commission:

Sports ability <http://www.ausport.gov.au/participating/disability/resources>

Physical Education Alabama Course of Study, Excellence in Physical Education, 2009

Teaching Disability Sport second edition Ronald W. Davis 2011