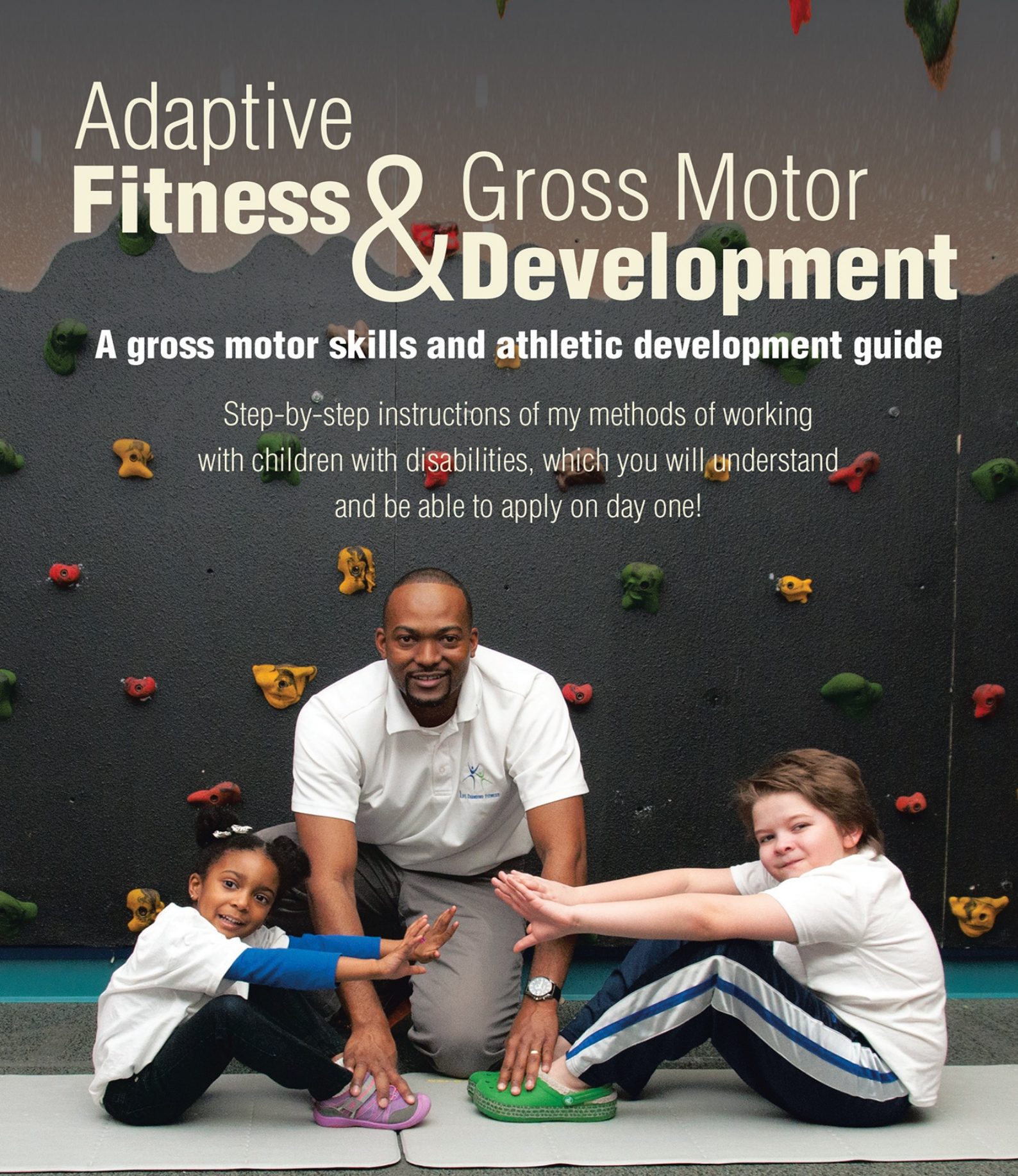
Adaptive **Fitness** & Gross Motor **Development**

A gross motor skills and athletic development guide

Step-by-step instructions of my methods of working with children with disabilities, which you will understand and be able to apply on day one!



Ricardo A. **Cunningham**

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INTRODUCTION

An increasing majority of children with varying levels of disabilities including: Autism Spectrum Disorders, Asperger's, ADD, ADHD, Down syndrome, intellectual disabilities and behavior disorders, as well as with typically developing children with varying skill levels exhibit challenges such as motor delays, coordination, self-esteem and weight management issues. These challenges make it difficult for children to just be children and participate in group activities with their peers. Early intervention is critical when dealing with such issues.

Children with disabilities speak the same language regardless of their nationality, ethnicity, or heritage; but they speak many dialects. To understand one child does not mean you understand another, it simply means you are closer to learning the multiple dialects that exist among children with disabilities. I have spent over thirteen years working with children with disabilities; and in that time I have mastered hundreds of dialects, allowing me to help children make life-changing transformations in their physical abilities.

In 2011 I founded my company, Life Changing Fitness LLC, and it has been my mission to create an environment for learning, developing social and physical skills, and enhancing creativity through personalized training programs. Our programs are customized for each child and have proven to improve their gross motor skills and athletic ability far beyond what was imaginable. Our success comes from connecting with the child, understanding the child's dialect, strengths, and weaknesses, and knowing their limits.

Parents always ask me, "Ricardo, how do I get my child to be motivated to do the same activities at home? I can't get them to do half the things they

do in gym." Some have even called me the "Autism Whisperer". There is a simple answer to this question: each child learns differently, therefore you first need to determine the child's learning style. The child may be a visual learner, auditory learner or a kinesthetic learner. Once you know the proper learning style to apply, you will begin to learn the child's dialect and it will be easier to motivate the child to do activities at home.

READING THIS BOOK

Another common question I get from parents is, "What can I do at home with my child, since we can't come to the gym every day?" We all know that children retain what they learn better through repetition, so, for a child with a disability, there needs to be more repetition to acquire skills in their activities. This book is designed to be a self-help book for parents, and anyone working with a child with a disability. This book can be used as a guide to the different types of activities, and their proper execution techniques, to help children with gross motor delays and also those needing to improve their athletic ability. The activities described will improve children's motor planning, motor processing, balance, visual-spatial awareness, coordination, hand-eye coordination, cardiovascular endurance, and strength.

My techniques have proved to be successful time and time again with children of varying profiles. Using some basic athletic equipment coupled with this book every day, you will be able to duplicate a gym experience. Your child will be engaged, learn fundamental skills, and also have fun playing with their family and peers. For adaptive fitness professionals, this book is an excellent resource and guide for the proper execution techniques to be used when working with a child with disability. The book provides detailed descriptions of how to perform each activity, as well as depictions of the activities with visual cues.

GETTING STARTED

The first step in working with a child with special needs is to know what you need to work on. It makes no sense to start working blindly with a child with no concept of what the child needs to improve on. Every child has their strengths and their weaknesses. You, the parent, should have your child assessed by a professional in the field to determine what you should be working on. You, the professional, should always complete an assessment of the child before you begin working with the child. It allows you to focus on what they need to improve on. It allows you to use the child's strengths to build their self-confidence, and to tailor a program that will turn those weaknesses into strengths.

Once you have assessed the child, you now know what your goals are. Set goals with the child so they have something to look forward to. You are now ready to begin the hard work. I say hard work because that's what it is. And with hard work there are great rewards. When you see your child achieve their first goal, it will be the best feeling for you and the absolute greatest accomplishment for your child. And it only gets better as the child continues to accomplish their goals.

Throughout the book I recommend that you perform three sets of ten repetitions for each activity. This means performing the activity ten times, taking a break, and performing another set of ten repetitions of that activity. Parents can increase the repetition or set for each activity based on the child's ability to focus. If your child gets frustrated or seems tired after the three sets of recommended repetitions, you should avoid increasing the repetitions during that session and add another day instead. If your child has the focus to continue after the three sets of recommended repetitions then you can add another set during that session.

In the next chapter I will discuss the different learning styles of children.

Chapter 1

LEARNING STYLES

To learn we depend on our senses to process the information around us. The three main learning styles are visual, auditory and kinesthetic. Everyone has one learning style that may be more effective than the others. It is very important to apply the right style of learning when teaching children with special needs, especially in a one-on-one setting. When you apply the style of learning that best suits the child, the child will be more motivated because they are able to process the information faster. And they are able to absorb the material easier. Applying the right style will also build their confidence and self-esteem.

Visual Learning

A visual learner is someone that learns best by *seeing* how something is done. They are able to retain the information and repeat what was demonstrated.

Auditory Learning

An auditory learner is someone that learns best by *listening* to directions and instructions given to them.

Kinesthetic Learning

A kinesthetic learner is someone that learns best through *hands-on experience.* The instructor needs to hold their hands and take them through the motion of the activity.

As a parent or professional, it is important that you know the three main types of learning styles and how to apply them when teaching the child. When you begin working with the child you should apply all three styles of learning to see which style works best. Once you know which style best

fits the child, you should use that as your primary technique of teaching the child.

You should note that some activities might require a different style of learning for the child than the style best suited for another activity. You may need to apply multiple styles on occasions. For example, the child may be a visual learner as a primary style, but when the child is learning how to bat you may need to apply both visual and kinesthetic techniques. In my experience working with children over the last thirteen years, I have found that over 95 percent of children who are challenged with motor skills absorb information and learn faster when you apply visual and kinesthetic learning techniques.

What is your child’s dominant learning style?

Does your child have a secondary learning style? What is it?

Chapter 2

CONNECTION AND MOTIVATION

Connection and motivation are the two key success factors when working with children with disabilities. As a professional, it takes time for me to build a bond with a child and form that connection. As the parent, this will be a bit easier for you since you already have that bond with your child. So your main goal is to motivate the child. Motivation is the key to building the child's self-confidence. Some techniques I use for connecting with the child are talking to them and getting to know them, and learning what their likes and dislikes are. You may know a lot about your child in the home and family environment, but do you know what their likes and dislikes are when it comes to fitness? Knowing their likes will help to minimize frustration when working with them. This will allow you to focus on their strengths rather than their weaknesses. Focusing on their strengths is the best way to motivate the child. It helps to build their self-confidence and encourages them, and they are more willing to try other tasks.

Other techniques for motivating the child include showing interest in them at all times, being engaged with the child, making sure the child has a positive experience, and having fun. It is very important that you share interest in activities with the child, and you are engaged when working with the child. Children can detect when you are not interested and it can make them frustrated and disconnected. They won't be focused on the activities and won't be willing to participate.

What are some ways you can connect with your child?

Chapter 3

GROSS MOTOR SKILLS AND ACTIVITIES

Delay in gross motor skills is very common among children with disabilities; the key to overcoming this challenge is early intervention. Start working with your child as early as possible. If your child has a delay in their gross motor development, start working with them TODAY. I say this not to be dramatic, but because I have seen what a difference early intervention can make in the lives of children and their families. When children are able to play with their peers on the same level, they have the self-confidence and self-esteem to socialize with others.

Throughout this book we will be discussing the various gross motor skills activities and giving you step-by-step instructions on how to help your child perform these activities. The gross motor skills activities include locomotors skills such as running, hopping, jumping, skipping, and galloping. Other gross motor skills activities include sport skills such as catching, throwing, kicking, batting, and dribbling. We will also speak about some other activities such as balancing, bike riding, bilateral movement, visual-spatial awareness, reactionary movement, strength activities, and cardiovascular activities that aid children in developing their gross motor skills.

We will not only discuss the standard ways of performing these activities, but we will also explain how to modify an activity to use the visual and hands-on technique for children that need more support.

Chapter 4

LOCOMOTORS SKILLS

Topic	Materials/ Equipment needed:
Hopping	10 Poly Spots
Jumping	2 Poly Spots
Skipping	30 Poly Spots
Galloping	10 Poly Spots

Locomotors skills help children build their coordination, motor skills, cardiovascular endurance, and balance. They also help build their visual-spatial awareness and motor control skills, especially during running activities when the child needs to slow down or stop. Developing the child's locomotors skills will help them control their body. The five locomotors skills are running, hopping, jumping, skipping and galloping. Let's get into the different locomotors skills and how to perform them effectively.

Running

Running is the most important locomotors skill, as the majority of sport activities involve running. Here are the steps to help the child develop their running ability:

1. Have the child start out using the stationary running technique.
2. Stand in position with the right leg lifted with a bended knee, and the left hand raised with the elbows bent, and then alternate the hands and feet.
3. Alternate raising the right leg and left hand with the left leg and right hand continuously on the same spot.
4. Land on the balls of the feet while alternating legs. This will help with power and speed.

5. Using the “chin-pocket” technique, swing hands, bringing one hand to the chin and the other hand to the pocket.
6. Keep the body in an upright position while looking straight ahead.
7. Repeat the above steps, doing three sets of ten repetitions three to four times per week; adjust as needed.

Once the child has mastered stationary running, the next step is to walk following the same techniques. Once the child is able to walk with the proper running form, they can transition to running. Start off running slowly, so the child is able to maintain control of their form before transitioning to greater speed. As the child becomes more comfortable and confident, their speed will gradually increase. Maintaining the proper form is essential in running.

Figure 4.1: Running form

Hopping

Hopping is another locomotors skill that is essential to the development of gross motor skills. It helps to develop coordination, leg strength, and

dynamic balancing. There are four types of hopping: forwards, backwards, sideways, and one-leg hopping. The steps to perform each type of hopping are the same, except the movement of the body is different. Here are the steps to help your child develop their hopping skills:

1. Have the child stand with both feet parallel and approximately six inches apart.
2. Bend the knees into a squatting position.
3. Bend the arms, keeping them close to the body.
4. Hop with both feet simultaneously, keeping the arms bent.
5. The child may choose to hop forwards, backwards, sideways, or to use one leg, depending on their ability.
6. Repeat the above steps, performing three sets of ten repetitions three to four times per week; adjust as needed.

If your child is having difficulty performing these steps, you should follow the hands -on technique:

1. Visually demonstrate to the child all the steps for hopping so the child can observe them before performing the skills.
2. Place ten poly spots in a straight line.
3. Assist the child with getting into the squatting position with feet six inches apart.
4. Hold both of the child's hands to assist them in hopping with both feet simultaneously.
5. Jump to the first poly spot and stop (this allows the child to maintain the correct form).
6. Continue this process until the child gets to the last poly spot. If the child is unable to jump with both feet simultaneously, they should continue to follow this process until they can.
7. Once they have learned how to hop using the proper technique, they can now practice hopping continuously from one poly spot to another without stopping.

8. When the child is able to hop continuously, you may release their hands.
9. Repeat these steps, performing three sets of ten repetitions three to four times per week; adjust as needed.

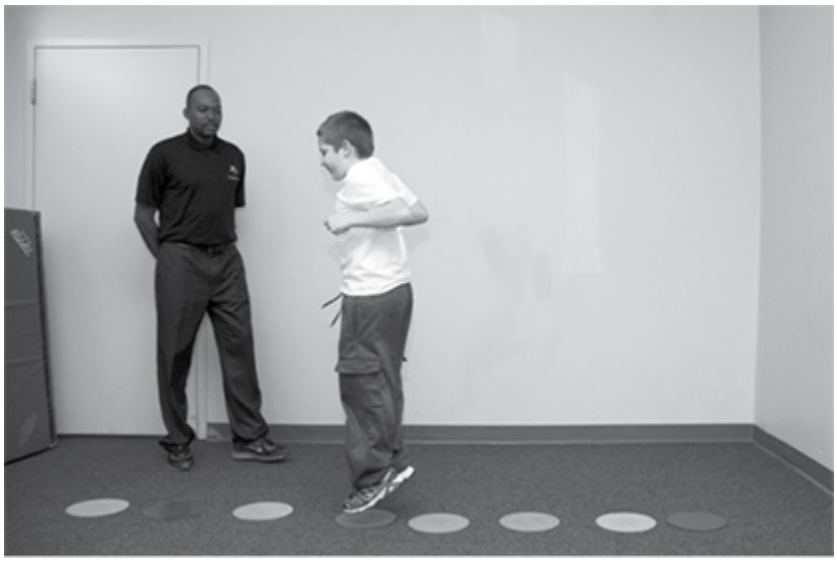

Figure 4.2: Hopping form

Jumping

Jumping is another important locomotors skill. It helps to develop leg strength, coordination, and gross motor skills. Here are the steps to help your child develop jumping skills:

1. Have the child stand with their feet apart, in line with their shoulders.
2. Bend the knees and lean forward.
3. Place arms straight back behind the body as far as possible.
4. Swing both arms forward and jump simultaneously; the arms should follow through all the way.
5. Perform three sets of ten repetitions, with a one-minute break between each set, three or four times per week; adjust as needed.

If your child is having difficulty performing these steps, or having difficulty jumping with both feet, you should follow the hands-on technique:

1. Visually demonstrate to the child all the steps for jumping so the child can observe them before performing the skills.
2. Place two poly spots six inches apart.
3. Assist the child with standing on one of the poly spots with their feet apart, in line with their shoulders.
4. Assist the child with bending their knees and leaning the body forward.
5. Assist the child with placing their arms straight behind their body as far back as possible.
6. Stand behind the child and assist the child with swinging their arms forward and back (this teaches them the motion to build up the muscle memory).
7. Perform three sets of ten repetitions, with a one-minute break between each set (or as long as needed), three or four times per week; adjust as needed.
8. Remain standing behind the child, placing your hands on the child's waist to assist the child with their lift.
9. Assist the child with jumping from one poly spot to another.
10. Perform three sets of ten repetitions, with a one-minute break between each set (or as long as needed), three or four times per week; adjust as needed.
11. Once the child is able to perform both skills, you can assist the child in performing them simultaneously.

Figure 4.3: Jumping starting position

Skipping

Skipping is another locomotors skill that helps children improve their cardiovascular endurance, coordination, and gross motor skills. Here are the steps to help your child develop their skipping skills:

1. Have the child stand with their feet three inches apart.
2. Step forward with one leg and swing the opposite arm forward.
3. Hop with the other leg while swinging the opposite arm forward.
4. Alternate stepping and hopping continuously while swinging the arms.
5. Repeat these steps, performing three sets of ten repetitions for a distance of thirty feet three or four times per week; adjust as needed.

If your child is unable to perform these steps or finds it difficult to skip independently, you should follow the hands-on technique:

1. Visually demonstrate to the child all the steps for skipping so the child can observe them before performing the skills.
2. Use visual cues such as poly spots so the child knows where to step and hop.
3. Place two rows of ten poly spots two inches apart in a straight

line. Use a different-colored poly spot for each skill: one color for stepping and one for hopping.

4. Position the child in front of the poly spots with both feet three inches apart.
5. Stand behind the child to assist them with stepping and hopping.
6. Move the child's leg forward to one poly spot and assist the child with swinging the opposite arm.
7. Help the child hop on to the other poly spot using the other leg and swinging the opposite arm.
8. Have the child alternate stepping and hopping continuously while swinging the arms.
9. Have the child walk while performing these steps so they can focus on the mechanics and maintain proper form.
10. Repeat these steps, performing three sets of ten repetitions for a distance of thirty feet three to four times per week; adjust as needed.
11. Once the child has mastered this technique, they can begin skipping continuously.

Galloping

Galloping is another locomotors skill that helps to improve gross motor skills, lower body strength, and coordination. Here are the steps to help your child with developing galloping skills:

1. Have the child stand with one foot in front of the body and the other foot behind it, six inches apart.
2. Rotate the shoulders in a square position.
3. Bend the elbows while keeping them close to the body
4. Begin by moving the leading leg forward, followed by the trail leg, with arms remaining in a bent position.
5. Six inches of space should remain between the legs throughout

the process.

6. Repeat these steps, performing three sets of ten repetitions for a distance of thirty feet three to four times per week; adjust as needed.

If your child finds it difficult to perform these steps, you should follow the hands-on technique:

1. Visually demonstrate to the child all the steps for galloping so they can observe them before performing the skills.
2. Place ten poly spots six inches apart in a straight line. The distance between the spots is used to help the child maintain their feet apart as they gallop.
3. Have the child stand on the poly spots with one leg forward and the other leg behind the body.
4. Stand behind the child.
5. Hold the child by the waist so they are able to maintain the upper body in a square position.
6. Have the child step forward to the next poly spot, with the tail leg following and maintaining the space between the legs. Continue this pattern until the child steps on the last poly spot.
7. Repeat these steps, performing three sets of ten repetitions for a distance of thirty feet three to four times per week; adjusted as needed.

Notes (Use this section to keep track of your activities and progress)

Running: _____

Hopping: _____

Jumping: _____

Skipping: _____

Galloping: _____

Chapter 5

SPORTS SKILLS

Topic	Materials/ Equipment needed:
Catching	Ball
Throwing	Ball
Kicking	3 poly spots
Batting	Bat, Ball
Dribbling Basketball	Basketball
Dribbling Soccer Ball	Soccer Ball

Sports skills are essential to child development. They help the child develop motor skills, coordination, social skills and self-confidence. They also help children with special needs develop other skills such as hand-eye coordination, tracking, visual-spatial awareness, stamina, strength, and cardiovascular endurance. Sports skills are a great way for your child to learn to work with others in a team setting. The child learns how to socialize in groups, take turns, share, and work with others to accomplish a common goal. Children with special needs need to be given more attention and a little more direction when learning the mechanics of these basic fundamental skills.

We will discuss the fundamental sports skills and give you the mechanics on how you can perform these skills with your child to develop their athletic ability. With each skill, you (the parent) should first explain the steps to the child as concisely as possible, and then perform a visual demonstration of the skills. If necessary, allow the child to observe you for two to three repetitions before having the child perform the skills. When performing any of these activities, it is very important to have your child count down from ten to one or count up from one to ten, so they are aware

of when the activity is coming to an end. This will help with transitioning to something else.

Catching

To help your child develop the proper technique to catch a ball, you should ensure the child follows each step listed below:

1. Have the child place their hands directly in front of their stomach, with their elbows bent and hands open.
2. Ensure the child keeps their eyes on the ball at all times.
3. As you (the parent) prepare to throw the ball, the child should extend their arms outward to catch the ball with their hands only.
4. Perform three sets of ten repetitions, with a one-minute break between each set, three to four times per week; adjust as needed.

Each child is different, and you as the parent need to make the judgment as to what distance you should be from the child. If the child is a beginner, you should stand three to four feet away from the child. You can then increase your distance from shorter to longer ranges as the child develops their catching ability.

If the child is having difficulty catching the ball from a distance of three to four feet away, you should move to the hands-on technique:

1. Visually demonstrate to the child all the steps for catching (you will need another participant to help with this) so they can observe them before performing the skills.
2. You (the parent) stand in front of the child.
3. Using one hand, assist the child with holding their hands open in the correct form.
4. Use your other hand to gently perform an underhand throw directly into the child's hand.
5. Assist the child in closing their hands to keep the ball from

falling.

6. Perform three sets of ten repetitions, with a one-minute break between each set (or as long as needed), three to four times per week; adjust as needed.

This will help build up the child's muscle memory and eventually the child will be able to catch the ball independently.

Figure 5.1: Catching body form and placement of hands

Throwing

Every child should know the proper technique to throw a ball. When your child learns the techniques of throwing they will be able to throw with faster speed, better accuracy, and more power. To help your child develop or improve their throwing skills you should follow the steps below:

1. Have the child stand in an upright position.
2. Step forward with the non-dominant foot.
3. Move the opposite hand forward to prepare to release the ball.
4. Move the throwing hand above the shoulder with elbows bent.
5. Extend the arms to release the ball.
6. Perform three sets of ten repetitions, with one-minute breaks between each set, three to four times per week; adjust as needed.

If your child is having difficulty releasing the ball, you should use the

hands-on technique:

1. Visually demonstrate to your child all the steps for throwing so they can observe them before performing the skills.
2. Stand behind the child to assist them with holding the ball by placing your hand on the child's hand. Your hand should be in control of the ball; this will allow you to help the child trigger the release as their throwing hand moves forward.
3. Ensure the child releases the ball as their hand moves forward in front of their body.

As the child begins to improve you will give them more control of the releasing of the ball. This allows the child to build their muscle memory and they will eventually have the motor skills to release the ball without assistance.

Figure 5.2: Throwing starting form

Kicking

Kicking is an important and fundamental skill for all children. It helps them build their coordination as well as develop their tracking skills and lower leg strength. Here are the steps to work with your child on their kicking skills:

1. Have the child stand in position at least one foot behind the ball.

2. Step with the non-dominant foot to the side of the ball.
3. Drive the dominant foot forward, kicking the ball with the inner part of the foot.
4. Perform three sets of ten repetitions, with a one-minute break between each set (or as long as needed), three to four times per week; adjust as needed.

To prevent injury, it is best to avoid using the toes when learning to kick. If your child is having difficulty performing these steps, follow the hands-on technique:

1. Visually demonstrate to your child all the steps for kicking so they can observe them before performing the skills.
2. Place three flat objects (such as poly spots) on the floor in the shape of a triangle. The distance between them is based on the size of the child. The child should not be stretching to reach the spots.
3. Place the ball on one of the poly spots, have the child stand on another poly spot, and place their non-dominant foot on the last poly spot.
4. Place your hand on the outer side of the child's dominant foot and propel the foot forward to make contact with the ball.
5. Perform three sets of ten repetitions, with a one-minute break between each set (or as long as needed), three to four times per week; adjust as needed.

Figure 5.3: Kicking body form and leg placement

Batting

Batting is an essential skill to help improve hand-eye coordination, tracking, and visual-spatial awareness. It also helps to build quick reactionary movement, focus, and bilateral movement. Here are the steps to help the child improve their batting skills:

1. Have the child hold the bat with both hands close together and tightly wrapped their fingers around the bat, with the dominant hand on top.
2. Stand sideways with feet apart. The non-dominant side should face the pitcher.
3. Move arms to an upright position with elbows bent, and rotate the pelvis to move the non-dominant arm to the center of the body.
4. Step forward, rotating the hips as the arms swing across the body to make contact with the ball. Continue to follow through once contact has been made.
5. Perform three sets of ten repetitions, with a one-minute break between each set (or as long as needed), three to four times per week; adjust as needed.

If the child is having difficulty with these steps, you should follow the hands-on technique for batting. You will need an additional participant to help with throwing the ball.

1. Visually demonstrate to your child all the steps for batting so they can observe them before performing the skills.
2. Stand behind the child, holding their hands around the bat to keep it in place.
3. Move their arms upright and position the non-dominant elbow at the center of their body.
4. Assist the child with swinging the bat across their body to make contact with the ball.
5. Perform three sets of ten repetitions, with a one-minute break between each set (or as long as needed), three to four times per week; adjust as needed.

Figure 5.4: Batting starting form

Dribbling

There are two types of dribbling: with a basketball or using a soccer ball. Dribbling a basketball helps to build eye hand coordination, fine motor skills, and visual-spatial awareness. To work with your child on dribbling a basketball, you should follow these steps:

1. Place the child’s hand over the ball with fingers spread apart and pointing downwards.
2. Lower the body by bending the knees while keeping the head up.
3. Bounce the ball to waist height, using the tips of the fingers, NOT the palm.
4. Perform three sets of ten repetitions, with a one-minute break between each set (or as long as needed), three to four times per week; adjust as needed.

If your child is having difficulty following the steps above, you should follow the hands-on technique:

1. Demonstrate the steps below by having the child observe you dribble the basketball two or three times before having the child perform the skills.
2. Position your body behind the child.
3. Place your hand over the child’s hand as they hold the ball.
4. You should be in control of the ball as you bounce the ball.
5. Perform as many repetitions as necessary, with a one-minute break between each set (or as long as needed) three to four times per week, adjusting as needed, until the child develops the skills to dribble independently.

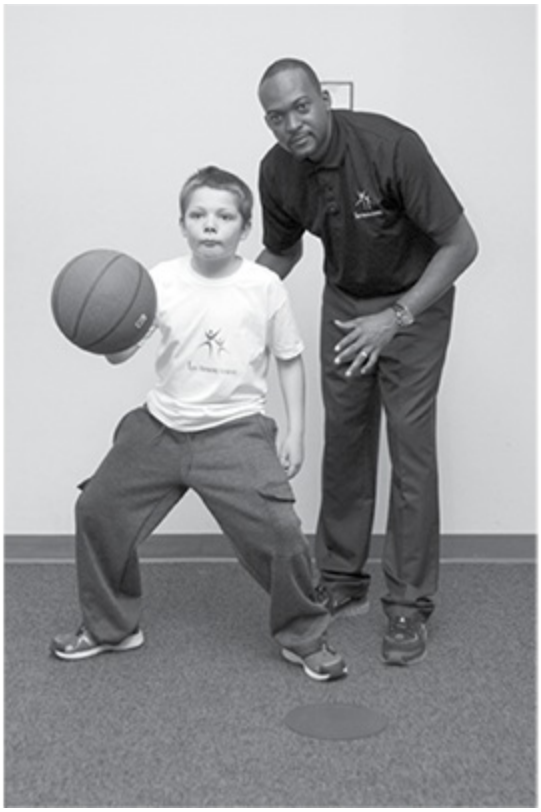

Figure 5.5: Dribbling basketball starting form

Dribbling a soccer ball helps to build eye feet coordination, motor control, and visual-spatial awareness. Perform these steps to work with your child on dribbling a soccer ball:

1. Have the child stand behind the ball.
2. Position the child's body in a galloping position, placing the dominant foot in front of the non-dominant foot.
3. Kick the ball using the outer side of the foot first, then the inner side of the foot while moving to the end point.
4. Perform three sets of ten repetitions for a distance of thirty feet from starting point to ending point, three to four times per week; adjust as needed.

If your child is having difficulty performing these steps, you should use the hands-on technique:

1. Demonstrate the steps below by having the child observe you dribble the soccer ball two or three times before having the child

perform the skills.

2. Place the ball in front of the child.
3. Stand beside the child and place your hand on the child's back, or hold their hands to prompt them when to kick the ball.
4. Have the child gently kick the ball with either the inner or outer side of the foot, whichever is more comfortable for them.
5. Prompt the child to move/run to keep ball close to them.
6. Continue this process, ensuring you are side by side with the child.
7. Perform three sets of ten repetitions for a distance of thirty to forty feet from starting point to ending point, three to four times per week; adjust as needed.

Notes (Use this section to keep track of your activities and progress)

Catching: _____

Throwing _____

Kicking: _____

Batting: _____

Dribbling: _____

Chapter 6

BALANCING

Topic	Materials/ Equipment needed:
Dynamic Balance	Balance Beam

Balancing is essential to the basic life skills. It is essential when performing sports-specific skills such as kicking, running and jumping. It is also the most important skill when learning to ride a bike. There are two types of balancing: static balance and dynamic balance.

Static Balance

Static balance is the ability to remain stationary. Some examples of static balance are standing on a balance board, or standing on one leg.

The steps for helping your child develop static balance are:

1. Place both of the child's hands on their hips.
2. Raise the non-dominant leg with knee bent, keeping the dominant leg planted in the ground.
3. Stand on the one leg for twenty seconds.
4. Perform three sets of twenty-second repetitions on the left leg, and three sets of twenty-second repetitions on the right leg, three to four times per week; adjust as needed.

If your child is unable to balance for at least ten seconds, you should perform the hands-on technique:

1. Visually demonstrate to the child all the steps for static balancing so they can observe them before performing the skills.
2. Stand in front of the child.
3. Hold both hands to assist them with their balance as they get into position.

4. Have the child raise one leg with knee bent.
5. Once the child is settled and is starting to maintain their balance, gently release their hands, remaining in close range to assist the child in maintaining their balance if necessary.
6. Perform three sets of twenty-second repetitions on the right leg, and three sets of twenty-second repetitions on the left leg, three to four times per week; adjust as needed.

Figure 6.1: Static Balancing standing on one leg

Dynamic Balance

Dynamic balance is the ability to maintain balance while moving. Some examples of dynamic balance are walking on a balance beam or in a straight line, and hopping on one leg.

The steps used to help a child develop dynamic balance are:

1. Have the child stand directly in front of a balance beam of two inches or more.
2. Step onto the balance beam from the front, NOT from the side, to minimize turning.
3. Walk along the balance beam, alternating one foot in front of the other.
4. Direct the child to look straight ahead as they walk along the

balance beam.

5. Perform three sets of three balancing repetitions three to four times per week; adjust as needed.

If your child is unable to stand on the balance beam, they should continue working on their static balance. If the child can stand on the balance beam, but is unable to alternate their feet one in front of the other while maintaining their balance, you should perform the hands-on technique:

1. Visually demonstrate to the child all the steps for dynamic balancing so they can observe them before performing the skills.
2. Have the child stand directly in front of the balance beam on one end.
3. Stand beside the child to assist them with getting on the balance beam.
4. Hold the child's hand gently with one hand above their wrist, and your other hand behind their back so you are able to maintain control.
5. Assist the child with walking along the balance beam until they can maintain their balance. Start by releasing their hand and as the child improves, you can remove your hands from their back.
6. Continue to walk side by side with the child to spot them should they lose balance.
7. Perform three sets of three balancing repetitions three to four times per week; adjust as need ed.

Figure 6.2: Dynamic Balancing walking across a balance beam

Notes (Use this section to keep track of your activities and progress)

Static Balance: _____

Dynamic Balance: _____

Chapter 7

BILATERAL MOVEMENT

Topic	Materials/ Equipment needed:
Bilateral movement	2 Poly Spots

Bilateral movement consists of moving the hands or feet across the body. It is an essential skill in building up coordination, crossing the midline, improving sports-specific skills, and coordinating the left and right quadrants of the brain. Children that have difficulty with bilateral movement struggle with sports-specific skills such as batting (being unable to swing completely across their body), swimming (having difficulty performing strokes requiring that one hand cross the other), and throwing (having difficulty following through across their body). This not only affects their sports skills, but also their life skills, such as the ability to perform daily activities, for example, such as moving objects around the house from one spot to the next. Someone with poor bilateral movement would move their entire body to move an object, rather than just moving their hands across their body to move an object. They are dependent on one side of the body and may only use one side of their body. This is why bilateral movement is so important: it affects your motor planning, motor skills, and coordination.

The steps necessary for developing or improving your child's bilateral movement are:

1. Have the child stand with both feet six inches apart.
2. Bend the knees and swing the right hand across the body to touch the left leg, and swing the left hand across the body to touch the right leg, alternating arms continuously.
3. Perform three sets of ten repetitions three to four times a week;

adjust as needed.

If the child is unable to move their hand across their body independently, you will need to do the hands-on technique:

1. Visually demonstrate to the child all the steps to develop bilateral movement so they can observe them before performing the skills.
2. Place two poly spots on the floor, three inches apart, for the child to stand on.
3. Stand in front of the child.
4. Hold the child's right hand and assist them in moving their hand across to touch their left leg.
5. Take the left hand and move it across the body to touch the right leg.
6. Repeat this alternating sequence, making a crisscross pattern.
7. Perform three sets of ten repetitions three to four times per week; adjust as needed. Depending on their skill level, allow th e child to try a few repetitions independently.

Figure 7.1: Bilateral Movement crossing midline

Notes (Use this section to keep track of your activities and progress)

Bilateral Movement: _____

Chapter 8

VISUAL-SPATIAL AWARENESS

Topic	Materials/ Equipment needed:
Visual Spatial Awareness	Agility Ladder, Poly Spot

Visual-spatial awareness is the ability to perceive distance between or among objects. It helps children improve their athletic skills such as catching, batting, riding and staying in their lane when running among others. For example when running a race, a person with poor visual-spatial awareness will have difficulty with properly spacing themselves among the other athletes. They may run too close to the person in front of them or run into the person. It is difficult for someone with poor visual-spatial awareness to ride a bike; they are unable to ride in a straight line. Visual-spatial awareness is not only important for athletic skills, but also for life skills. Even at home when they are in common surroundings, someone with poor visual-spatial awareness may walk into objects such as hallway tables, chairs, or even walls. They are not aware of the distance between their body and the object before them. This is even more dangerous for children since they tend to run more often than walk. When running, it is harder for them to judge the distance between themselves and the object before them.

Improving visual-spatial awareness is vital in preventing accidents or injuries, especially among children. The steps to developing or improving visual-spatial awareness include:

1. Place an agility ladder on the floor.
2. Have the child stand in front of the agility ladder.
3. Run in the middle of the agility ladder without touching the rings or going outside the ladder, while looking straight ahead.

4. Perform three sets of six repetitions, three to four times per week; adjust as needed.

It is important that the child keeps their head up when running. This allows them to see where they are going and it helps to build their visual awareness. If your child is having difficulty running through the agility ladder and/or keeping their head up, you should follow the hands-on technique:

1. Visually demonstrate to the child all the steps to develop visual-spatial awareness so they can observe them before performing the skills.
2. Place the child in front of the agility ladder, and place poly spots in middle of each square of the agility ladder.
3. Stand behind the child to assist them.
4. Hold the child's leg and have them lift one leg at a time over the rings as they keep their head up. You (the parent) focus on moving the child's leg; the child focuses on keeping their head up.
5. Help the child build up their muscle memory by helping them with the first half of each set, and have them try the second half of each set independently.
6. Perform three sets of six repetitions, three to four times per week; adjust as needed.

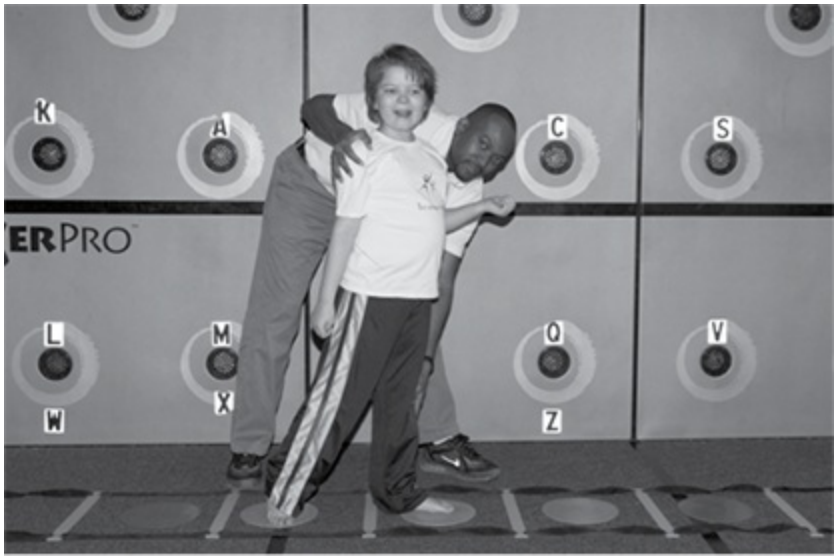

Figure 8.1: Visual Spatial Awareness, using an agility ladder

Notes (Use this section to keep track of your activities and progress)

Visual-Spatial Awareness: _____

Chapter 9

CARDIOVASCULAR ENDURANCE

Cardiovascular endurance is the ability to take oxygen into your body that then circulates to your muscles through movement to produce energy. It is one of the most important exercises to develop your internal organs, especially the heart and the lungs. There are many different ways to build cardiovascular endurance, but the activities we use to develop cardiovascular endurance with our clients are locomotors skills such as hopping and running (see Chapter 4, Locomotors Skills).

Chapter 10

REACTIONARY MOVEMENT

Topic	Materials/ Equipment needed:
Reactionary Movement	5 Poly Spots

Reactionary movement is the ability to react to an object at a specific speed; either by catching or touching the object. It is a key component in developing athletic skills such as batting, catching, and starting a race. The steps to develop reactionary movement include:

1. Have the child stand three feet in front of you.
2. Throw the object to the left or right of the child, so the child moves from their base of support to try to touch or catch the object.
3. Throw the object directly in front of the child so the child moves forward to touch or catch the object.
4. Throw the object over the child's head so the child moves backwards to touch or catch the object.
5. Perform three sets of ten repetitions at least three to four times per week; adjust as needed.

If the child remains stationary rather than moving in response to the object, the child needs to build up their gross motor skills. If the child is moving in response to the object but moves slowly, then the child needs to build up their reactionary movement. If your child is having difficulty performing the steps above, you should use the hands-on technique. This will help the child to develop their reactionary movement and gross motor skills, and build up their muscle memory. You will be using a balloon as the object to perform the hands-on technique. A balloon moves at a slower pace, which will give the child more time to react.

1. Visually demonstrate to the child all the steps to develop reactionary movement so they can observe them before performing the skills.
2. Place five poly spots six inches apart on the ground. Place one in the center for the child to stand on, one to the right and left of the child, and one in front of and behind the child.
3. Have the child stand on the center poly spot.
4. Stand behind the child, holding both arms just above the wrist.
5. Have someone stand twelve inches away from the child to throw the balloon.
6. As they throw the balloon to the left or right of the child, assist the child in reacting by moving the child's arm to reach out and touch the balloon.
7. As they throw the balloon in front of the child and over the child's head, assist the child in reacting by moving the child's arm to touch the balloon.
8. Perform three sets of ten repetitions at least three to four times per week; adjust as needed.

Notes (Use this section to keep track of your activities and progress)

Reactionary Movement: _____

Chapter 11

BIKE RIDING TECHNIQUES

Topic	Materials/ Equipment needed:
Bike Riding	Bike, 6 Cones, Balance Buddy

Bike riding is a very unique and special skill to develop among children with special needs because of all the components needed to develop the skill. Bike riding encompasses balancing: the child must be able to sit on the bike and keep their feet on the ground to maintain their balance; coordination: the child must be able to pedal, keep their head up and steer the bike at the same time; gross motor skills: the child must have the ability to pedal the bike continuously; fine motor skills: the child must be able to have a firm grip to hold on to the handles and also to apply the brakes on the bike; visual-spatial awareness: the child must have the ability to judge or gauge the distance between themselves and what is in front of them so that they don't ride into anything; and finally, cardiovascular endurance and strength: the child must have the leg strength and endurance to maintain continuous pedaling for a period of time.

Bike riding is not only a physical skill, but it's also a life skill that families use for social events and recreation. If the child has not learned to ride a bike, they will miss out on opportunities to participate in family events or social events with their friends. Many children with disabilities have difficulty socializing with friends, so it is important that they be able to partake in family events that can help them with their social skills.

When teaching the child to ride a bike you should follow the steps outlined below:

Safety Precautions

- Ensure the child is wearing a helmet, knee pads, elbow pads, and

riding gloves.

- Riding lessons *should take place on flat pavement*. AVOID hills and areas with gravel or grass.
- Always ensure you are in close range to assist the child when necessary to avoid accidents or injuries.
- Always remind the child to ride at a slow/moderate pace to maintain control of the bike. AVOID speeding, especially around turns.

In preparation for teaching the child how to control the bike, remove the pedals from the bike to minimize distraction, so the child will not try to pedal while you are working on bike control skills. This also helps to minimize the pedals getting in the way as the child is walking the bike.

1. Place six cones in a straight line at a distance of twenty feet apart.
2. Have the child sit on the bike with both feet flat on the ground.
3. Have the child remain seated as they walk, while steering the bike straight (the child should not be assisted at this stage).
4. Have the child walk to each cone and practice braking the bike at each cone. You should instruct the child when to brake the bike until they are able to do so independently.
5. While walking, as the bike begins to lean in either direction, have the child turn the handles slowly in that same direction to balance the bike, then gradually move the handles back into a straight position.
6. As the child sits on the bike, stand behind the child, placing both your hands on the outside of the child's arms for support.
7. With the bike in a stationary position, have the child lift both feet up with knees bent, count to six, and place their feet back on the ground. Perform three sets of ten repetitions, or as many as needed.
8. Once the child has mastered walking and steering the bike, have

the child begin to walk faster, so the bike can move independently without being pushed.

9. As the bike is moving independently, have the child lift their feet off the ground with knees bent for at least six to ten seconds, or for as long as they possibly can. You should place your hands on the outside of the child's arms to help them maintain their balance, if necessary, and prevent them from falling.
10. If the bike begins to lean while moving faster, remind the child to turn the handle slowly in the same direction to balance the bike, and gradually turn the handle back into a straight position (these should be small turns). If the bike leans too low, the child should put their feet down to minimize falling, and start over.

At this point, if the child has shown that they can balance the bike, steer, and balance with their feet off the ground, the pedals can be placed back on the bike.

11. Stand behind the child with your hands on the outside of their arms. Have the child sit on the bike, and place one foot on a pedal and one foot on the ground.
12. With the foot placed on the pedal, push down on the pedal and with the other foot on the ground, push off the ground, simultaneously. Put the other foot on the pedal to get the bike moving, and start pedaling.
13. As the child begins to pedal, the child should keep the bike handles straight, and their head up, body centered, and posture in an upright position.
14. As they are riding the bike, if the bike leans to the left or right, the child should make a small turn slowly in the same direction to maintain their balance, and gradually straighten the handles back to a straight position.
15. Once the child is comfortable riding the bike, they will work on

turning the bike. Place six cones in a straight line at a distance of ten feet apart, and three additional cones at the end of the line in the shape of the letter U.

16. Have the child sit on the bike with both feet flat on the ground and scoot the bike so that it can move independently, then, turn the bike between the cones.
17. At the last cone make a U turn and go back to the starting point. Once the child has mastered scooting fast and turning, they can move on to riding and turning.
18. Have the child continue to practice the above skills as much as possible, three to four times per week, until the child is able to ride, turn and brake independently without any assistance.

If the child is not able to sit on the bike and walk with the bike independently, you should use the hands-on technique. When teaching the child to ride the bike with the hands-on technique, it is best to focus on each riding component separately. The items needed are: the bike, a Balance Buddy Bike Handle, and six cones.

In preparation for teaching the child how to control the bike, remove the pedals from the bike.

Balancing

1. Remove the pedals and attach the Balance Buddy to the back of the bike frame, and the mounts to the outside of the bike wheel.
2. Visually demonstrate to the child how to sit on the bike and walk it.
3. Stand behind the bike and hold on to the Balance Buddy.
4. Have the child sit on the bike.
5. Have the child walk forward as you are holding the Balance Buddy with the least amount of support possible (use your fingers to gauge the level of support needed: all five fingers is full

support, two fingers is minimal support).

6. Once you can release the Balance Buddy and the child can walk the bike by themselves, you can move on to the next step.
7. With the bike in a stationary position and you holding on to the Balance Buddy with the least amount of support possible, have the child lift their feet up with their knees bent for as long as possible. As the bike starts to lean, they should put their feet down.
8. Repeat this step as many times as needed to build up the child's balance.

Figure 11.1: Balancing on the bike using the balance buddy

Steering

1. Visually demonstrate steering to the child by sitting on the bike in a stationary position with both feet on the ground. Lean the bike to the left, then slowly make a small turn to the left, and gradually turn the bike handles back to a straight position. Then lean the bike to the right, make a small turn slowly in the same direction, and gradually straighten the handles back again.
2. Now that you have demonstrated steering for the child, stand in the center of the bike with one hand holding onto the Balance Buddy, and one hand on the bike handle.

3. Have the child sit on the bike with both hands holding onto the handles and both feet flat on the ground.
4. Lean the bike to the left, have the child make a small turn slowly to the left to balance the bike, and gradually turn the bike back into a straight position.
5. Next you will have the child lean the bike to the right, make a small turn slowly to the right to balance the bike, and gradually turn the bike back into a straight position.
6. Repeat these steps as many times as possible until the child is able to turn the handles independently.

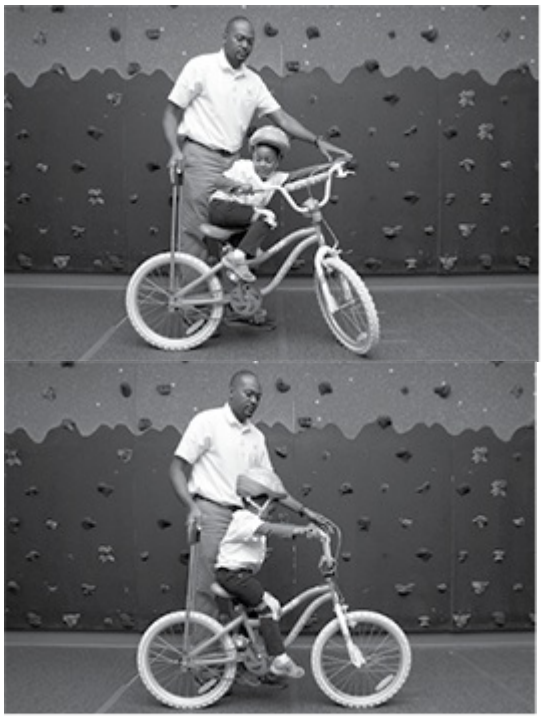

Figure 11.2: Turn handle in opposite direction then back straight

Braking

It is best to learn braking earlier in the bike riding process, rather than later, to ensure the child knows how to stop the bike. We find that children are so excited about riding when they start moving that they tend to go faster than they should. So it is very important that early in the lessons you encourage them to slow down and ride at a controllable pace and also, that they learn to brake the proper way.

1. Place six cones in a straight line at a distance of thirty feet apart.
2. With the bike in a stationary position, show the child where the brakes are and visually demonstrate to the child how to squeeze the brakes.
3. Have the child sit on the bike with their feet flat on the ground, and practice how to brake the bike. Count to ten and say “Brake.” The child should brake on ten. Continue this process until the child is able to demonstrate they can brake the bike independently when instructed.
4. If the child is unable to brake the bike independently, they need to work on their fine motor skills. Place your hands over their hands on the handles and practice squeezing the brakes. This will build their muscle memory.
5. When the child demonstrates they can brake the bike in a stationary position, you can move on to walking and braking.
6. With the six cones in place, explain to the child that each cone is a stop sign and they need to brake at each stop sign.
7. Have the child sit on the bike with both feet flat on the ground and walk to each cone. At each cone instruct the child to brake the bike. Remember to stay in close proximity at all times.
8. Perform three sets of ten repetitions, three to four times per week; adjust as needed. The more a child practices, the better their reaction will be when braking.

Figure 11.3: Squeeze the brakes to stop the bike

Coordination

1. Visually demonstrate how to coordinate walking fast, and getting the feet off the ground, while steering the bike and maintaining balance at the same time.
2. Stand behind the child holding onto the Balance Buddy.
3. Have the child sit on the bike and begin to walk fast. As the bike starts to move independently, have the child lift their feet off the ground with their knees bent, while steering and maintaining their balance as long as they can.
4. You should gradually decrease the level of support needed with the Balance Buddy as the child begins to improve. They will need to practice these skills as many times as possible until they learn to balance and steer independently.

Pedaling

1. Attach the pedals back on to the bike.
2. Visually demonstrate to the child sitting on the bike and pushing off with one foot on the ground, and one foot on the pedal.
3. Once the bike begins to move, have the child place both feet on the pedals and begin to pedal as they steer the bike. Have them

maintain their balance by keeping their body centered and keeping the handles straight.

4. At this stage, the child should be able to balance with little or no support. But as a precaution, you (the parent) will stand behind the Balance Buddy and place both hands on the outside of the Balance Buddy. You must move with the bike as the child begins to pedal.
5. Have the child sit on the bike with one foot on the ground and one foot on a pedal.
6. With the one foot on the ground, have the child push off to start moving the bike, and then place both feet on the pedals to start pedaling the bike continuously as they steer and maintain their balance.
7. Practice this step as much as possible until the child is fully confident riding without assistance.

Figure 11.4: Place feet securely on pedals and pedal the bike

Turning

You should only move on to turning when the child is able to ride the bike independently without any assistance. Turning is the final step in bike riding.

1. Place six cones in a straight line, with a distance of ten feet between each cone. At one end of the line, place three additional cones to form the shape of the letter U.
2. Have the child sit on the bike with their feet flat on the ground.
3. Have the child walk while sitting on the bike and alternate turning left and right between each cone. Even though they can ride at this point, it is necessary to start out walking so they can control the bike and get a feel for turning the bike.
4. At the final cone, have the child make a large U-turn following the cones at the end of the line.
5. Perform three sets of six repetitions, or as many as needed, until the child is able turn efficiently.
6. Once they have mastered walking and turning the bike between each of the cones, have the child ride the bike slowly and turn between each of the cones. As a precaution, you should hold onto the outer handle of the Balance Buddy using the least amount of support possible.
7. Perform three sets of ten repetitions, or as many as needed. Practice riding at least three to four times a week to continue developing the child's riding skills.

Figure 11.5: Turning the bike

Notes (Use this section to keep track of your activities and progress)

Balancing: _____

Steering: _____

Braking: _____

Coordination: _____

Pedaling: _____

Turning: _____

Chapter 12

STRENGTH

Topic	Materials/ Equipment needed:
Knee Pushups	Yoga Mat
Standard Pushup	Yoga Mat
Shoulder Press	Poly Spots, Therapeutic Ball
Squats	Poly Spot
Sitting Scooter	Sitting Scooter
Standard Sit-Up	Yoga Mat
Modified Sit-Ups	Slanted Mat
Crunches	Yoga Mat
Leg Raises	Yoga Mat
Planks	Yoga Mat

Strength is the ability to be physically strong. Strength is a great way to develop muscle toning and external muscles. It helps to reduce fatigue, hypotonia and cellulite, and builds muscle endurance. Muscle endurance is the ability to use your muscles for an extended period of time, especially for people who play sports. There are different types of strength: upper body strength, lower body strength, and core strength. Below are the techniques I use to develop strength in children.

Upper Body Strength

The techniques used to develop upper body strength are push-ups and shoulder presses, using therapeutic weight balls. There are three versions of push-ups that can be used with children: the standard push-up, knee push-up, and wall push-up.

Push-ups

The wall push-up is for beginners who do not have the strength to do the standard push-up or the modified version. Follow these steps to help your child perform the wall push-up:

1. Place two poly spots six inches apart, one foot away from a wall.
2. Have the child stand on the poly spots with arms bent at the elbows and palms placed against the wall.
3. The child should then push themselves away from the wall, straightening their arms, then lean back in.
4. Perform three sets of ten back and forth repetitions three to four times per week; adjust as needed.

If the child is unable to push themselves away from the wall, then you should perform the hands-on technique:

1. Place two poly spots six inches apart, one foot away from the wall.
2. Visually demonstrate to the child all the steps for the wall push-up so they can observe them before performing the skills.
3. Have the child stand on the poly spots with arms bent at the elbows and palms placed against the wall.
4. Stand beside the child and place one hand on their chest, and one hand on their back, and assist the child by pulling them up gently as they straighten their arms.
5. Repeat this back and forth motion with the child. As the child improves and gets stronger, you should give them less support until they are able to perform the wall push-up by themselves.
6. Perform three sets of ten back and forth repetitions three to four times per week; adjust as needed.

Figure 12.1: Starting position for wall pushups

The knee push-up is for children who are at an intermediate level, who do not have the coordination or strength to do the standard push-up: they can use their arms to pull themselves up, but do not have the core strength to fully push themselves up off the ground. Follow these steps to help your child perform knee push-ups:

1. Have the child lay flat in the ground, facing downwards with elbows bent and hands flat on the ground in line with their shoulders.
2. Have the child push themselves up into an upright position with arms straight and keeping knees bent.
3. The child should push themselves up and down while maintaining their body in a straight position. Only the torso and arms should be moving; the knees should remain on the ground.
4. Continue this up and down motion.
5. Perform three sets of ten up and down repetitions three to four

times a week; adjust as needed.

If the child is unable to push themselves up, then you should perform the hands-on technique:

1. Visually demonstrate to the child all the steps for the knee push-ups so they can observe them before performing the skills.
2. Have the child lay on the ground facing downwards.
3. Place two poly spots by the child's knees and two poly spots by the shoulders.
4. The poly spots will be used to guide the child where to put their knees and hands, and also as a cushion for the knees.
5. Squat or get in a lower position beside the child to assist them.
6. Place one hand on their chest to assist in pulling them up, and one hand on their -back to assist them with balancing as they lower themselves back down.
7. Assist the child with performing this activity, and as the child improves and gets stronger, give them less support until they are able to perform the knee push-up by themselves.
8. Perform three sets of ten up and down repetitions three to four times per week; adjust as needed.

Figure 12.2: Upright position for knee pushups

The **standard push-up** is for children who have the strength to push themselves up from the ground without assistance. Follow these steps to help your child perform standard push-ups:

1. Have the child lay flat on the ground facing downwards, with elbows bent and palms flat on the ground in line with the shoulders.
2. Place toes pointing downwards and keeping the body straight, push upwards.
3. As the child pushes up from the ground and straightens the arms, the body should remain straight.
4. Continue this up and down motion.
5. Perform three sets of ten up and down repetitions three to four times a week; adjust as needed.

If the child is unable to push themselves up off the ground, you should follow the hands-on technique:

1. Visually demonstrate to the child all the steps for performing the standard push-up so they can observe them before performing the skills.
2. Have the child lay flat on the ground facing downwards, with elbows bent and palms flat on the ground in line with the shoulders.
3. Squat or get in a lower position beside the child to assist the child.
4. Have the child place their toes pointing downwards, and keeping their body straight, push upwards.
5. Place one hand on their chest to assist them in pushing up, and one hand on their back to assist with balancing as they lower themselves back down.
6. Assist the child with performing this activity, and as the child improves and gets stronger, you should give them less support

until they are able to perform the standard push-up by themselves.

7. Perform three sets of ten up and down repetitions three to four times per week; adjust as needed.

Figure 12.3: Upright position for standard pushups

Shoulder press

The shoulder press is performed by using a therapeutic weight ball. The therapeutic ball is a soft weighted ball in weights varying from two to ten pounds. The weight used is based on the strength of the child. Follow these steps to perform the shoulder press with the child:

1. Have the child stand in a stationary position, holding the therapeutic weight ball with both hands at waist level.
2. Push the ball upwards above the head until the arms are extended straight.
3. Continue the motion of bending and extending the arms.
4. Perform three sets of ten repetitions three to four times a week; adjust as needed.

If the child is unable to push the ball above their head, then you should perform the hands on technique:

1. Visually demonstrate to the child all the steps for the shoulder press so they can observe them before performing the skills. .

2. Place two poly spots on the floor six inches apart from each other.
3. Have the child stand on the poly spots in a stationary position, holding the therapeutic weight ball with both hands at waist level.
4. Stand behind the child holding their elbows, and assist them in pushing the ball up, and extending their arms into a straight position.
5. Continue the motion of bending and extending the arms. As the child builds up their strength, you can reduce the level of support until they are able to perform the activity by themselves.
6. Perform three sets of ten repetitions three to four times a week; adjust as needed. As the child improves you should increase the weight of the ball.

Lower Body Strength

The techniques used to develop lower body strength are hopping, squats, and using the sitting scooter.

Hopping

Refer to Chapter 4.

Squats

Squats can be done using body weight or the therapeutic weight ball. Most children use their body weight, but children who have developed the strength and need to be challenged can use the weight ball to increase the weight. Follow these steps to help the child perform squats:

1. Have the child stand in a stationary position with feet six to eight inches apart.
2. Squat by bending the knees into a sitting position, with the upper body remaining in an upright position for three seconds, and then rise back up by straightening the legs.

3. Continue the up and down motion while maintaining posture of the upper body.
4. As the child improves, you can challenge them to squat while holding a weight ball.
5. Perform three sets of ten repetitions three to four times a week; adjust as needed.

If the child is unable to stay in a squatting position for three seconds, or they are unable to maintain their form, you should perform the hands-on technique:

1. Visually demonstrate to the child all the steps for squats so they can observe them before performing the skills.
2. Place two poly spots on the floor six to eight inches apart.
3. Have the child stand on the poly spots, with you standing behind the child.
4. Spot the child by placing your hands on their waist.
5. Assist the child as they squat into a sitting position, and then by giving them enough support to get back into a standing position.
6. Continue to spot the child until they have developed the strength to perform the activity independently.
7. Perform three sets of ten repetitions three to four times a week; adjust as needed.

Using the sitting scooter

The sitting scooter can be used to build upper body, lower body, and core strength. Follow these steps to help your child use a sitting scooter to build lower body strength:

1. Have the child sit on the scooter with knees bent and facing forward, holding the scooter on the sides with both hands.
2. Have the child extend both legs forward and move the scooter, pulling the body forward, and then return the legs back to their

original position.

3. Continue the cycle of extending the legs and pulling the body forward to move the scooter forward.
4. Perform three sets of ten scoots, three to four times a week; adjust as needed.

If the child is unable to move the scooter with their legs, you should perform the hands-on technique:

1. Visually demonstrate to the child all the steps for using the sitting scooter so they can observe them before performing the skills.
2. Have the child sit on the scooter with knees bent and facing forwards, while holding the scooter on the sides with both hands.
3. Stand beside the child and place your hands on their back to assist them as they try to move the scooter.
4. With your assistance, have the child extend both legs forward to pull the body and move the scooter forward, and then return the legs back to the original position with your assistance.
5. Continue the cycle of extending the legs and pulling the body forward to move the scooter forward.
6. As the child gets stronger you should reduce the amount of support given to the child.
7. Perform three sets of ten scoots three to four times a week; adjust as needed.

Figure 12.4: Starting position using the sitting scooter

Core Strength

There are many different ways to improve core strength by working on upper and lower abs, and the oblique muscles. They include sit-ups, crunches, leg raises, and planks. You can also use the sitting scooter to improve core strength.

Sit-ups

There are many types of sit-ups, but because many children do not have the strength to do sit-ups by themselves, we need to assist them in doing modified sit-ups. We will discuss the standard sit-up before we go into the modified sit-up. Follow the steps below to help your child perform standard sit-ups:

Standard sit-ups

1. Place a yoga mat or folded gymnastic mat on a flat surface for safety.
2. Have the child lie on their back with knees bent and feet close together.
3. Place the hands in a crossed position across the chest.
4. Assist the child with keeping the correct posture by holding their

feet down.

5. With you holding their feet down, the child pulls their upper body off the floor all the way up, touching their elbows to their knees, and then lies back down.
6. Continue the up and down motion to perform a full sit-up.
7. Perform three sets of ten repetitions three to four times a week; adjust as needed.

Figure 12.5: Mid-Upright position for standard sit-up

Modified sit-ups

Most children will need to perform the modified version of the sit-up as beginners. You will need a slanted mat or a physical therapy wedge pillow to create an incline. Follow the steps below to perform the modified sit-up:

1. Place the slanted mat on the floor.
2. Have the child lie on the slanted mat with their head in an inclined position and legs straight.
3. Stand in front of the child with your arms out and support them by putting your feet over their feet, placing your body weight towards your heels.
4. Have the child extend their arms straight out and as they pull themselves up, they should touch your hands and then lie back

down.

5. Because the child is already in an incline, they are actually performing a half sit-up.
6. Continue to use the slanted mat until the child has built up enough core strength to perform a full sit-up on a flat surface.
7. Perform three sets of ten repetitions three to four times a week; adjust as needed.

If the child is unable to perform the modified sit-up by lifting themselves up, you should perform the hands on technique:

1. Place a yoga mat or folded gymnastic mat on a flat surface for safety.
2. Have the child lie on their back with the knees bent and feet close together.
3. Stand in front of the child holding a noodle, and place your feet over their feet, putting your weight on your heels to avoid applying pressure on the child's feet.
4. Hold the noodle in a horizontal position using both hands.
5. Bend your knees to get closer to the child so they are able to hold on to the noodle.
6. Have the child extend their arms straight to hold the noodle with both hands.
7. Have the child pull themselves all the way up, with you assisting them by pulling on the noodle, and then lower themselves back down while continuing to hold on to the noodle.
8. As the child gets stronger you should reduce the amount of support given to the child.
9. Assist the child until they have developed the strength to perform the modified sit-up independently.
10. Perform three sets of ten repetitions three to four times a week; adjust as needed.

Figure 12.6: Upright position for modified sit-up

Crunches

Crunches are an intermediate to advanced technique to build up core strength not typically used with beginners.

1. Place a yoga mat or folded gymnastic mat on a flat surface for safety.
2. Have the child lie on their back with their arms extended up, knees bent, and feet in an upright position off the ground.
3. Stand in front of the child with your arms extended towards the child.
4. The legs should remain in position as the child lifts their upper body up off the ground and touches your hands.
5. As they crunch up and down, the arms and leg should remain in position.
6. Perform three sets of ten repetitions three to four times a week; adjust as needed.

Leg Raises

Leg raises are an intermediate to advanced technique for building core strength not typically used with beginners.

1. Place a yoga mat or folded gymnastic mat on a flat surface for safety.
2. Have the child lie on their back, placing their hands under their derriere, with legs extended.
3. The child should lift both legs off the floor as high as they can, and then lower them back onto the floor.
4. Continue to raise the legs up and down while keeping the body straight.
5. If it is too difficult for the child to keep their legs straight, they should bend their knees slightly.
6. Perform three sets of ten repetitions three to four times a week; adjust as needed.

Planks

Planks are an advanced technique for building core strength not typically used with beginners.

1. Place a yoga mat or folded gymnastic mat on a flat surface for safety.
2. Have the child lie flat on their stomach and lift themselves off the ground on their lower arms and their toes.
3. Maintain the body in a straight position while looking straight ahead.
4. Hold the plank for ten seconds and return to the starting position.
5. Take twenty- to thirty-second breaks between planks.
6. Perform three sets of ten planks three to four times a week; adjust as needed.

Figure 12.7: Holding the plank position

Notes (Use this section to keep track of your activities and progress)

Upper Body Strength: _____

Lower Body Strength: _____

Core Strength: _____

CONCLUSION

Gross motor skills are very essential to our daily lives. Every movement of our body requires some form of gross motor skill. And so it is important that children are given the opportunity to reach their full potential. Now that you have read this book and applied the techniques, your child's life and their gross motor development will be changed forever.

It is my hope that this book will be beneficial to your child in all aspects of their life. This book will not only help them with their gross motor skills, but also with their social skills, confidence, and in their work environment. It will also help them to take more chances and be more willing to take part in more activities involving movement. It was a pleasure sharing my techniques and skills with you to help your children develop their gross motor skills.