

USBC Level I Presentation

Slide 1: Welcome to USBC Coaching

This program is designed to provide you with the skills necessary to help new bowlers of all ages learn to enjoy our sport. We recommend that you partner with a certified coach in your area to discuss the material and how it relates to the bowler. To locate a coach, visit Find-a-coach on BOWL.com.

We encourage you to set a time frame goal for completing this course. As you will learn later, setting goals can help keep you focused and motivated to complete any task.

Slide 2: Lesson One: Facility and Equipment

Slide 3: The Playing Field: Components of a Bowling Center (contains audio)

“There are a number of centers that have a variety of other recreational activities included on their premises. We will only cover those which are related to bowling.”

Control Desk

The heartbeat of most bowling centers is the control desk, where you check in to receive a lane assignment, rent shoes and get answers to any questions you may have.

Concourse

The concourse is the area behind the bowling area where spectators sit and bowlers consume food and drink. Bowlers change into and out of their bowling shoes and store their bowling ball bags and personal items in this area.

Bowling area or settee

The bowling area or settee is where bowlers wait to bowl. A typical bowling area has a seating area and a console where names are entered to keep score.

Slide 4: The Playing Field

Lane Construction

It is important to note that all lanes must be built and maintained, within specifications provided by the United States Bowling Congress.

Lanes are constructed using wood or a synthetic material. Wood lanes consist of 39 boards each slightly wider than one-inch in width. These boards are placed tightly side-by-side. Synthetic lanes have this same 39-board pattern laminated onto the surface.

All lane beds are 41½ to 42 inches wide from channel to channel, and approximately 64 feet in length from the foul line to the back row of pins. It is 60 feet from the foul line to the center of the head pin.

Slide 5: The Playing Field, cont.

Board Numbering

Boards are always numbered starting from the side where the bowler holds the ball. That is, a right-handed bowler will count from right to left, starting with the No. 1 board next to the right channel and a left-handed bowler will count from left to right, starting with the board closest to the left channel as No. 1.

With 39 boards on the lane, the middle of the lane will always be the 20th board with 19 boards on either side.

Slide 6: The Playing Field, cont.

Approach

The 16-foot approach is the area where the bowler sets up to deliver the ball.

Foul Line

The foul line is a ¼-inch boundary line at the end of the approach. This line separates the approach from the lane. If a bowler steps on or beyond the foul line, a foul is committed.

NOTE: The foul line comes into play only if the bowler releases the ball (known as a “legal delivery”).

Slide 7: The Playing Field, cont.

Heads (also known as the Fronts)

The first 15 feet of the lane from the foul line to the target arrows is called the heads or Front. This area was traditionally made of hard maple wood to withstand the constant impact of bowling balls hitting the surface.

Pines (also known as the midlane)

The middle 30-foot section of the lane beginning at the end of the heads is the pines or midlane. This area takes far less punishment from bowling balls because the ball normally never impacts the pines – it rolls on it.

Backend

The last 15 feet of a lane just before the pin deck, is called the back end. The backend was traditionally constructed of soft pinewood, which allowed the ball to hook and then roll into the pins.

Slide 8: The Playing Field, cont.

Pin Deck

The pin deck is the four-foot area behind the back end. Pins are spotted on the pin deck in a triangular configuration and equally spaced 12 inches apart. The pin deck is made of hard maple wood to support the pins and withstand the impact of flying pins when struck by a bowling ball.

Channels

Two channels—one on each side of the lane—run from the foul line to the end of the lane. This portion of the lane represents a 10 inch out-of-bounds area. Channels receive balls that roll off the lane and direct them past the pins to the end of the lane.

Slide 9: The Playing Field, cont.

Lane Dressing

Lane dressing is applied to the lane surface beyond the foul line. An oil-based substance also referred to as conditioner. Lane dressing is applied to protect the lane surface and affect the difficulty level of the sport. Coaches and athletes must understand the potential dangers of slipping or falling and avoid walking beyond the foul line on the lane surface.

Slide 10: The Playing Field, cont.

Ball Return

Adjacent to the channels is the lane's ball return. The ball return serves two purposes: to hold bowling balls in a circular or straight ball rack and to return the ball from the pin area to the ball rack after a bowler has taken a shot. Most ball returns are simply underground tubes that use gravity to transport the ball to the ball rack. Ball returns are situated between two lanes so that two lanes are served by the same ball return.

Slide 11: The Playing Field, cont.

The Pin Triangle

10 pins are arranged in four rows on the pin deck as shown to the right. In this triangular configuration, pins are positioned 12 inches apart.

Pins are identified by numbers 1 through 10.

The single pin closest to the foul line is called the head pin and identified as the 1-pin. Pins are always numbered from left to right, so the 2- and 3-pins make up the second row of the triangle. The 4-, 5- and 6-pins comprise the third row, while the 7-, 8-, 9- and 10-pins are in the fourth row.

Slide 12: The Playing Field, cont.

Pin Construction

Like lanes, pins are uniform in size, shape and weight. Each pin is 15 inches tall, has a circumference of 15 inches, is approximately four and 11/16 inches in diameter and must weigh between 3lbs 6oz – 3lbs 10oz. Weight variance in each set of pins must not exceed four ounces. Each pin has two inner hollow areas, called voids, giving it a “topple angle” of approximately nine degrees. Topple angle is the term used to describe the angle that the pin must reach before it falls over.

Slide 13: The Playing Field, cont. (contains audio)

“Dots, arrows and boards found on playing surface of the lane are specifically placed for athlete's to use as targets and guide to play the game.”

Approach Locator Dots

Three sets of dots are located on the approach; two sets are positioned approximately 12 and 15 feet from the foul line. They are designed to help bowlers line up in the stance. Depending on the lane installation, a center will either have a set of 5 or 7 dots positioned at these distances.

Lane Locator Dots

The third set is located just before the foul line and always has 7 dots. All of the dots are 5 boards apart from each other with the middle dot being on the 20th or middle board of the lane.

Slide 14: the Playing Field, cont.

Target Arrows

There are seven target arrows located 15 to 17 feet from the foul line. The arrows are spaced five boards apart, with the fourth arrow on the 20th or middle board on the lane. The recommended target arrow to use for new and beginner athlete's is the second arrow.

Remember...

For right-handed bowlers, the arrows are numbered from right to left.

For left-handed bowlers, the arrows are numbered from left to right.

Spot Bowling

Changing the perception of targeting or aiming directly at a pin is referred to as pin bowling or spot bowling.

Slide 15: The Playing Field, cont.

Dot-Arrow-Pin Alignment

Not only do the dots in all three sets line up with each other; they also line up with their corresponding target arrows further down the lane.

Looking down the lane, the three sets of locator dots and their corresponding arrows appear to be in dead-center alignment with the pins. In reality, this is true only for the large center dots, their corresponding fourth target arrow, and the 1 and 5 pins, as shown on the right.

Slide 16: The Playing Field, cont.

Dot-Arrow-Pin Alignment, continued

The remaining dots and arrows line up with their corresponding pins as follows:

The dots and arrows (arrows 5, 6 and 7 for a right-handed bowler) to the left of the head pin, the pin's center is slightly to the left of the dot-arrow alignment. The amount of this off-center alignment increases slightly with each pin as you move from the 2- and 8-pins toward the 7-pin.

The dots and arrows (arrows 3, 2 and 1 for a right-handed bowler) to the right of the head pin, the pin's center is slightly to the right of the dot-arrow alignment. The amount of this off-center alignment increases slightly with each pin as you move from the 3- and 9-pins toward the 10-pin.

Slide 17: Equipment Basics (contains audio)

"As a coach, I cannot over emphasize how important it is to have a ball that properly matches the athlete.

A good analogy would be playing baseball using a bat that is too heavy or too light; too long or too short or the handle is too narrow or too wide. You certainly could play the game and go through the motions and hit an occasional ball but your ability to learn and improve would be limited. The same is true for bowling."

Selection Factors

There are three factors to consider when selecting the right bowling ball:

- 1) Weight
- 2) Span
- 3) Hole sizes

Each of these factors is discussed in detail in the material that follows.

Slide 18: Equipment Basics, cont. (contains audio)

“Selecting a proper weight ball for your athletes is important. An improper decision here will adversely affect their ability to learn.”

Weight

Finding the proper ball weight is important. Balls will weigh anywhere from 6 pounds up the maximum 16 pounds allowable by USBC Specifications.

When considering ball weight, problems with delivering a ball can be a result of the ball being either too light or being too heavy. It is easy to see the affects to the body when a ball is too heavy. The athlete is stiff, the body movements are not smooth and ball speed is pretty slow. When a ball is too light, the athlete is able to easily change the direction of the armswing which will affect their accuracy and the ball speed is fast.

The key is to determine the proper ball weight that will best swing within the natural movements of the body.

Slide 19: Equipment Basics, cont.

Weight, continued

There are several different suggestions for helping your athlete select a proper ball weight. Keep in mind each athlete is an individual with different body types, strengths and abilities. There is no exact technique to determine proper ball weight. The following items should be used as a “starting point” in this process:

10 percent of the athlete’s body weight (i.e. 120 lb. bowler = 12-lb. ball)

Age will equate to pound of ball. (8 years old = 8-lb. ball)

Slide 20: Equipment Basics, cont. (contains audio)

“When determining proper ball weight, it is important to watch the effects of the weight of the ball to the overall posture of the athlete’s body - during the selection process.”

Palm Test

Use the following procedure to fine tune the selection process. Keep in mind you are working with athletes of different sizes, abilities and strength.

Have the athlete hold his or her bowling hand waist-high, palm up and out in front.

Place a bowling ball into the palm of the hand (Note: if the weight is visible on the ball, make sure the ball is in a position where the bowler cannot see the weight to influence the outcome.)

Look to see how the body responds to the weight. You are looking for a ball that slightly moves the hand downward.

Slide 21: Equipment Basics, cont.

Ball Sling

Using a ball sling is another technique that can be used to determine proper ball weight. A ball sling is a piece of cloth with two handles that bowlers use to carry a ball. Place the ball inside the sling and have the bowler gently swing the ball backward and forward as if bowling.

Ball Sling, cont.

Look for a fairly free arm swing where the athlete cannot easily change the direction the ball is swinging. The ball should not be so heavy that it physically alters the body's posture and balance.

Slide 22: Equipment Basics, cont.

Grip Test

Finally, some younger athletes and those unable to pass the 10- to 15-second grip test also will use a Two-handed bowling style. The grip test determines whether a bowler can hold the ball at his or her side with one hand for 10 to 15 seconds without visible discomfort or struggle to maintain the grip.

Bowlers who have physical or mental difficulties or impairments that make traditional one-handed bowling unduly restrictive, unsafe or impossible also may prefer the Two-handed style.

Slide 23: Equipment Basics, cont.

Span

The distance between the thumb and finger holes is known as the span.

The span is the correct length when the second joint of the middle two fingers extend over the near edge of the finger holes about one-quarter of an inch.

Beginning bowlers start with a span known as a conventional grip. This means that the fingers (middle and ring fingers) are inserted to the second joint and the thumb is fully inserted into the thumb hole.

Slide 24: Equipment Basics, cont. (contains audio)

“When finding that first house ball, there is a tendency to use balls with large holes so there will be no problems getting out of the ball. This scenario causes the athlete to grip the sides of the holes very tightly hoping they will not drop the ball.

When an athlete is introduced to a properly fitted ball they will usually need to learn to relax their hand and their grip to let the ball come off their hand.

Now that they have a proper fit, it is important to make sure it stays this way. Span and hole size should be checked frequently for young athletes. Monthly checks should be done or at least every time the athlete goes up to a larger shoe size.”

Thumb Hole Size

The thumb should be inserted entirely into the ball. A correct fitting thumb hole is just snug enough to allow a relaxed thumb to easily exit the ball once the thumb is fully inserted.

Finger Hole Size

The fingers holes should also be snug but comfortable.

Slide 25: Bowling Attire

Clothes

It is important that your athletes wear comfortable, loose fitting clothing when they bowl; although not so loose as to interfere with fluid movement. Freedom of movement across the shoulders and under the arms is imperative, as is the ability to bend at the knee with no restriction.

Slide 26: Bowling Attire, cont.

Shoes

Bowling shoes are made with leather or synthetic suede soles. This allows an athlete to slide as the ball is delivered.

Rental shoes, available at the control desk, are constructed with leather or synthetic suede soles on both the right and left shoes. This allows either right- or left-handed bowlers to slide as the ball is delivered.

Athletes may choose to purchase their own personal shoes. Recreational bowling shoes will be constructed similar to rental shoes (i.e. leather or synthetic suede soles on both shoes).

High Performance shoes have a leather or synthetic suede sole on one shoe and a rubber sole on the other. The rubber sole provides traction as the athlete goes into the last step of the approach. Right-handed bowlers will have the traction shoe on the right foot and left-handed bowlers will have the traction shoe on the left foot.

Slide 27: Lesson Two: Safety Awareness and Etiquette

Slide 28: Why Safety Awareness?

Reasons for Safety

There are several reasons why you should promote safety awareness for your athletes. Among them:

- Concern for the safety, health and welfare of the participant
- Many accidents or injuries can be prevented; awareness helps reduce the risk to participants whenever possible

Your job as a coach is to be aware of potential safety hazards, both personal and environmental. In this capacity, you become a risk manager. An effective risk manager is one who can prevent accidents from happening.

Slide 29: Risk Management (contains audio)

“USBC Coaching understands that there are inherent risks for injury in any sport. As an active member of the USBC Coaching’s Coaches Association a coach may participate in an umbrella liability insurance policy as part of their membership.”

Risk Management: A three-step process

Effective risk management involves a three-step process:

- 1) Identifying the risks that your team could be exposed to
- 2) Evaluating the risks
- 3) Controlling the risks

Slide 30: Risk Management, cont.

Nine Legal Issues

In your role of risk manager/coach, there are nine legal issues you must be aware of and responsible for:

- 1) Properly plan the activity
- 2) Provide proper instruction
- 3) Supply a safe physical environment
- 4) Offer adequate and proper equipment

Nine Legal Issues, cont.

- 5) Determine age appropriate abilities, skill level by size, maturity
- 6) Evaluate athletes for injury or incapacity
- 7) Supervise the activity closely
- 8) Warn of inherent risks
- 9) Provide appropriate emergency assistance

Slide 31: Risk Management, cont.**Common Reasons for Injuries**

Following are three common reasons for injuries involving facilities:

- 1) Improper design, construction, placement or installation
- 2) Improper use of equipment
- 3) Inadequate maintenance and repair

Slide 32: Risk Management, cont.**Common Principles**

Keep written records and develop written plans (examples):

- Proper training program
- Emergency/crisis plan
- Incident reports
- Staff qualifications on file
- Safety information
- Lesson plans
- Weekly attendance

Slide 33: Risk Management, cont.**Instruction Tips**

Use the following instruction tips:

- Be aware of how you handle your athletes. Ask permission before you touch any part of an athlete's body. Avoid any action that could be construed as inappropriately touching your athlete
- Distribute safety rules and warnings
- Supply adequate instruction and demonstration of activity
- Properly match equipment to athlete
- Be aware of and understand the limitations of your athletes
- Make sure communications are understood

Slide 34: Equipment Safety

Shoe & Foul Line Safety

Avoiding Moisture

Picking up moisture on bowling shoes is probably the No. 1 enemy for bowlers. The smooth rubber and leather on bowling shoes becomes sticky even if slightly wet. Since a bowler's approach ends with the foot sliding, wet soles can be treacherous.

Foul Line

When a bowler crosses the foul line and commits a foul, it is important to check the bowler's shoes for oil; this will reduce the ability to slide.

IMPORTANT

Advise your bowlers to stand up slowly after a fall over the foul line in order to avoid slipping again and incurring (further) injury.

Slide 35: Equipment Safety, cont. (contains audio)

"Having athlete paying attention and being aware of inherent dangers that are a part of any sport will minimize the potential for injury."

Bowling Ball Safety

Picking up a Ball

The proper method of picking up a bowling ball from the ball return is with two hands on each side of the ball, as shown below. This prevents pinched fingers in case another ball comes out of the ball return.

Slide 36: Equipment Safety, cont.

Handling a Bowling Ball

After picking up the ball, you should cradle it on the non-ball-side hip and arm as shown below. A bowling ball is a smooth, heavy object that can easily slip from your grasp if you are not careful.

Slide 37: Equipment Safety, cont.

Hand Dryers

Bowler's should dry their hands with a towel and/or use the air dryers' on the ball return.

Inserting and Releasing Fingers and Thumb

To ensure a smooth release, while in the stance, the bowler should insert the middle and ring finger into the ball first, followed by the thumb. During the release, the thumb leaves the ball first followed by the fingers.

IMPORTANT

Proper fitting of the holes is important. Holes that are too snug will not allow the ball to come off the hand cleanly, while holes that are too big will cause bowlers to squeeze their hands to hold onto the ball.

Slide 38: Lesson Three: Coaching the Youth Athlete

Slide 39: General Characteristics

Coaching the Youth Athlete

Physical and motor skills, psychological and social characteristics determine how children differ from one another, as well as how they learn. These skills and characteristics influence how youngsters progress and how they relate to others. In some instances, they even determine whether or not the youngsters will return to bowl the following week.

When teaching youth athletes, be aware that there are age-specific characteristics that affect their motivation, behavior and ability to learn the sport of bowling.

Slide 40: General Characteristics, cont.

Matching Skill Levels

Physical size is not a safety factor in bowling. Therefore, bowlers should be permitted to move up or down in age groups to better match them with others of similar skill level or social characteristics.

When dealing with beginners - particularly young beginners - pay attention to their individual differences. However, do not let those differences become obstacles to their potential ability. Help them learn as much as possible. Treat them as if they have the potential to succeed at whatever you teach them, and they will learn all you teach.

Slide 41: Physical Motor Skills

Body and Mind

“Kinesthesia” is the ability to feel, repeat or imitate a movement by observing others and sensing where the body parts are in relationship to one another in doing the task at hand.

Bowlers will best learn motor skills and certain muscle movements through practice. Practice will reinforce motor skills and make that motion permanent. Coaches must help their athletes practice intelligently to achieve the desired motor skills.

Coaches also should strive to help their athletes find their own level of excellence, since achieving perfection is virtually impossible.

Slide 42: Social Factors (contains audio)

“Although a lot of time is spent teaching the game of bowling, you need to understand and not lose sight of the bigger picture. As a role model, you are teaching life skills and must be mindful that your actions will directly affect the character development of your athletes.”

Benefits of Sports

Youngsters who participate in sports tend to exhibit better social behavior, get along better with others, perform better in school, are more physically active and are healthier than those who don't participate.

Slide 43: Social Factors, cont.

Information by Age Division

Which are more important for beginners?

- Physical or motor characteristics
- Psychological traits or social factors

For the most part, characteristics discussed previously were general in nature, but when each bowler is considered individually, this answer may vary depending on whether you are working with the youth athlete in an individual or group setting.

When working with youth athletes determine how characteristics apply to the various age groups. There will be times when you will have to adapt your activities to the athletes.

Slide 44: Lesson Four: Physical Game Development

Slide 45: Understanding the Physical Game

Introduction

Success in the physical game lies with the athlete and the bowling ball moving together as one. Maintaining balance and developing flow throughout the entire process are key elements to mastering the physical game.

If the ball and the body are out of sync and moving in different directions, the body will adjust to the forces that a “ball in motion” exerts. In this situation, the body will work unnecessarily hard to deliver the ball. As the body continuously adjusts to these forces, these questions must be asked: “Is the athlete bowling the ball?” or “Is the ball bowling the athlete?”

Slide 46: The Coach's Eye* (contains audio)

“It is difficult to know where to start when you see arms and legs moving all over the place.

To better understand the physical game it is recommended that a coach analyze parts of an athlete’s physical game.”

The Coach’s Eye

The process of analyzing an athlete’s delivery includes four reference areas:

- 1) Waist down: foot placement, knees and hips
- 2) Waist up: spine, shoulders, head and eyes
- 3) Ball position: height and position side-to-side
- 4) Hand position: grip (position of fingers and thumb)

Slide 47: Coaching Tip (contains audio)

“Being both the adult and the coach, you control the process and environment for learning. You need to effectively communicate so everyone can clearly understand concepts. Athletes should not have to adjust their perspective to grasp what you are teaching.”

Coaching Tip

When instructing, a coach should always try to demonstrate using the dominant hand of the athlete with whom they are working.

In a group setting, it is recommended that the coach use terms such as “ball side” and “non-ball-side” instead of “right hand” and “left hand” so all athletes will understand the explanation.

Slide 48: Important Coaching Activity

Introduction

It is strongly recommended that once you have completed this course that you “the coach” take the time to go to the bowling center and try each part of the five-part progression found in the next section.

To gain a true understanding of what the athletes will experience you should use:

- Rental shoes
- House ball
- “Non-dominant hand”

This exercise is important part of this course. The activity of bowling with your non-dominant hand will help you develop patience when working with the beginner athletes.

Slide 49: Five-Part Skill Progression (contains audio)

“This progression is designed to build the development of the athlete from the foul line back to the beginning stance – also referred to as backwards linking. Each step of the process will not change what was previously taught. It is designed to build and add new skills to what has already been learned.”

The Purpose

The skill progression is to first teach athletes to establish a balanced finish position at the foul line. From this balanced position, it is important that athletes maintain balance as they deliver the ball.

The five-part skill progression includes:

- 1) Pee Wee Two-handed delivery
- 2) Staggered stance without a push away
- 3) Staggered stance with a push away
- 4) One-step delivery
- 5) Four-step delivery

Slide 50: Delivery Types

Pee Wee Two-handed Deliveries

Used by youth unable to hold and deliver the ball with one-hand.

Teach the Two-handed delivery (when applicable) - as beginning point of a learning progression. It is important that all your youth students use a method that starts them on a path of building a strong foundation for delivering the ball.

Slide 51: Delivery Types, cont.

Pee Wee Two-handed Deliveries, continued

A key part of this progression is to establish the feeling of delivering the ball from a balanced finished position. An important part of this progression is introducing and having the athlete use an exaggerated Two-handed follow through. Click on the video to replay.

Slide 52: Delivery Types, cont.

Pee Wee Two-handed Deliveries, continued

Start introducing the lane markings such as locator dots, foul line and targeting arrows to help decrease the athlete's dependence of bumpers to keep the ball on the lanes.

Slide 53: Delivery Types, cont.

Pee Wee Two-handed Deliveries, continued

Skills Taught

- Safety
- How to pick up and carry a ball
- Lane markings

Waist Down

- Athlete's position is about six inches behind foul line at the center locator dot
- Feet set shoulder width apart
- Knees bent
- Hips square - parallel to foul line

Slide 54: Delivery Types, cont.

Pee Wee Two-handed Push

Waist Up

- Spine tilted forward
- Head up with eyes on target

Ball Position

- Ball is placed on the floor and positioned between the feet
- Ball is positioned with holes in a 9 o'clock – 3 o'clock position facing the ceiling

Slide 55: Delivery Types, cont.

Pee Wee Two-handed Push, continued

Hand Position

- Hands are positioned behind and slightly under the ball

The Delivery

- From the starting position on the floor, the ball is pulled slightly backward
- As the ball moves forward, the hand releases from the ball as it passes the ankles
- The Arms continue in forward motion and end up above the head simulating a follow through motion

Slide 56: Delivery Types, cont.

Pee Wee Two-handed Toss

Waist Up

- Spine tilted forward
- Head up with eyes on target

Ball Position

- Bowler holds the ball off the floor with both hands
- Ball is positioned with holes in a 9 o'clock – 3 o'clock position facing the ceiling

Slide 57: Delivery Types, cont.

Pee Wee Two-handed Toss, continued

Hand Position

- Hands are positioned slightly behind and under the ball

The Delivery

- The ball is moved slightly forward and then back between the legs. As the ball comes forward again they will release it and follow through to the ceiling with both hands.

Slide 58: Delivery Types, cont.

Pee Wee Two-handed Approach

In the last 15 years or so, aside from the conventional one-handed approach and delivery that has been taught, there has been the development of an alternative Two-handed approach by a growing number of young athletes. Even though the ball is being swung on one side of the body with two hands it will ultimately be released with one hand at the point of release.

This style of bowling requires flexibility and athleticism and is not for everyone.

Slide 59: Delivery Types, cont. (contains audio)

"If an athlete has the ability to hold the ball with one-hand, then obviously the pee-wee two handed delivery should not be used.

Whether a one-hand or 2 handed approach delivery is being taught, the beginning athlete still needs to learn the feel of swinging and releasing the ball from a balance position at the foul line. It is recommended that when the ball is being delivered with a dominant hand, that the fingers are inserted into the finger holes to begin to development of a strong release."

Coaches Note

Once athletes have demonstrated the ability to hold the ball with one hand, a coach should introduce the one handed delivery.

This instructional program, at this time, will continue to primarily teach the traditional approach and delivery.

A good coach is aware that there are different ways to bowl and will not limit the growth and development of their athletes to their own way or version of bowling.

Slide 60: Delivery Types, cont.

“The purpose of this progression is for the athlete to feel the ball swinging from the shoulder, with a loose muscle-free swing.”

Staggered Stance without a push away

This delivery is to be used by beginning athletes who are able to deliver the ball with one hand. A key part of this progression is to establish the feeling of allowing gravity to swing ball from the shoulder. Any muscling or trying to control the movement of the ball will disturb the natural balance of the athlete.

Developing and feeling the motion of a loose ball swinging from the shoulder is important. To this end the initial motion of the ball is forward. An initial backward motion will promote early muscling of the arm to generate ball speed. A coach should be careful not to overlook this part of the progression. In many cases, introducing a pushaway motion too early may result in the athlete wanting to grab or pull the ball early in the ball swing to generate ball speed.

Slide 61: Delivery Types, cont.

Staggered Stance without a push away, continued

Skills Taught

- Foot placement
- Balanced stance with feet staggered
- Introduce use of second arrow
- Thumb/finger placement

Waist Down

Feet are position six to 18 inches apart with the ball-side foot behind the non-ball side foot.

Lower the hips to create a posture where the knees will bend – knees will be four to six inches out in front of the body
Knees are bent for balance.

Slide 62: Delivery Types, cont.

Staggered Stance without a push away, continued

Waist Up

- Spine tilted slightly forward
- Head up with eyes on target

Ball Position

- Ball is suspended under the athlete's ball-side shoulder

Slide 63: Delivery Types, cont.

Staggered Stance without a push away, continued

“Starting the ball immediately into a backswing will require using muscles to generate motion.

Moving the ball forward first will give the athlete the opportunity to relax the arm muscles allowing gravity to swing the ball backwards and then forward before releasing the ball.”

Hand Position

- Hand is positioned with thumb and fingers at a 12 o'clock – 6 o'clock position (straight ball release)

The Delivery

- From a suspended position under the ball-side shoulder, athlete moves the ball forward to waist high position
- From this point on, gravity will be the force that moves the ball
- Allow the ball to swing backward to a comfortable height

Slide 64: Delivery Types, cont.

Staggered Stance without a push away, continued

The Delivery, continued

- Forward swing of the ball is generated by the weight of the ball allowing the athlete to maintain balance
- Ball is released at the bottom of the swing as the ball passes non-ball side ankle

Slide 65: Delivery Types, cont.

Staggered Stance without a push away, continued

“Movement of the body torso or if the athlete is having a problem maintaining balance during this delivery are strong indications that the ball swing is being controlled or muscled.”

Items to watch

- Athlete maintains 12 o'clock – 6 o'clock hand position throughout
- Movement of arm swing is smooth and without any sudden movements
- Once placed into the initial forward motion, this delivery consists of a single backward swing before the ball is released on the subsequent down swing
- Ball is released at the bottom of the swing – early or late release indicates problems that need to be addressed
- No excessive movement of the body
- Athlete maintains balance throughout entire process
- Allowing the athlete to swing the ball backwards and forwards multiple times may cause a problem with balance and maintaining the arm swing direction or even holding on to the ball

Slide 66: Delivery Types, cont. (contains audio)

“The initial motion of the ball or pushaway must be smooth, fluid and continuous. Any sudden moves, pauses, hesitations or stopping of this motion will disturb the natural flow and movement of the body.”

Staggered Stance with a push away

This delivery is used by beginning athletes who are able to smoothly move the ball from the push away into the downswing.

Shape of the initial motion of the ball into the down swing needs to be a rounded motion. Issues which may prevent this smooth rounded motion include using a ball that is too heavy or an improper fit where the span or finger hole sizes are either too big or too small.

Just as with the staggered stance without a push away, delivery is with all motion from the arm, the feet comfortably on the ground with the torso of the body completely still and silent.

Slide 67: Delivery Types, cont.

Staggered Stance with a push away, continued

Skills Taught

- Introduction of a push away motion

Waist Down

- Feet are position six to 18 inches apart with the ball-side foot behind the non-ball-side foot
- Lower the hips to create a posture where the knees will bend – just as in the previous progression
- Knees are bent for balance

Slide 68: Delivery Types, cont. (contains audio)

“Starting ball position should not be in the center of the body or directly in front of the ball side shoulder. It is recommended that the ball start position be between these 2 points.”

Staggered Stance with a Push Away, continued

Skills Taught

- Introduction of a push away motion

Waist Down

- Feet are position six to 18 inches apart with the ball-side foot behind the non-ball-side foot
- Lower the hips to create a posture where the knees will bend – just as in the previous progression
- Knees are bent for balance

Slide 69: Delivery Types, cont. (contains audio)

Staggered Stance with a push away, continued

“In keeping with the earlier comments made regarding a single continuous motion of the ball swing, the initial movement of the ball should not end with the arms extended straight out in front of the body. An athlete’s arms will fully extend as the ball moves into the downswing.”

The Delivery

- From the ball positioned just inside the athlete's ball side shoulder, the ball moves forward to where the arm is extended 65 percent away from the body
- Initial ball direction needs to be straight out or in a slightly downward motion. Ball should NOT be raised upward or pulled backwards at the start
- As the ball reaches this point, it will drop into its down swing; the overall shape of this motion is round and continuous

Slide 70: Delivery Types, cont.

Staggered Stance with a Push Away, continued

The Delivery, continued

- Allow the ball to swing backward to a comfortable height
- Forward swing of the ball is generated by the weight of the ball which will allow the athlete to maintain balance.
- Ball is released at the bottom of the swing as the ball passes non-ball side ankle

Slide 71: Delivery Types, cont. (contains audio)

"Although the hand position for the hook release is introduced as part of this delivery and understanding that each athlete is an individual with different abilities, it is up to the coach to determine WHEN to introduce this skill."

Staggered Stance with a Push Away, continued

Hand Position at Release

- Hand is positioned with thumb and fingers at 10 o'clock – 4 o'clock for a right-hander and 2 o'clock – 8 o'clock for left-hander (hook ball release)
- Using an analogy of the hand being in a position of holding a glass of water can be used for athletes who may not understand the clock face example

Slide 72: Delivery Types, cont.

Staggered Stance with a Push Away, continued

Items to watch

- Athlete maintains 10 o'clock – 4 o'clock or 2 o'clock – 8 o'clock hand position throughout
- Movement of arm swing is smooth and without any sudden movements
- Weight of the ball is used to generate energy and speed of ball swing
- Ball is released at the bottom of the swing – early or late release indicates problems that need to be addressed
- No excessive movement of the body
- Athlete maintains balance throughout entire process
- With the higher starting position, ball will generate more momentum and the potential for an inconsistent arm swing

Slide 73: Delivery Types, cont. (contains audio)

“Part of being successful begins with preparing the body to deliver the ball.

Developing a solid beginning stance or athletic pose is an important item that should not be over looked.

A good athletic pose will include a number of body pre-sets that will minimize the number of body movements during the approach and delivery.”

Athletic Pose

In all sports, prior to the execution of a set of physical movements athletes will establish a posture or an athletic pose that will maximize the execution of these movements.

By presetting the body, an athlete can limit the number of movements to only those necessary to execute their delivery. This means there are fewer items to go wrong; thus increasing the chance for success.

With the introduction of footsteps the importance of the coach’s eye reference points takes on more significance in the development of the athletic pose.

Slide 74: Delivery Types, cont.

One-step Delivery

Once the push away has been successfully incorporated into the delivery, they are ready to add the motion of moving their feet.

The coordination of these movements introduces the concept of timing. Timing is the correlation of the position of the ball relative to the steps taken.

The purpose of the one-step delivery is to teach coordination by incorporating the push away, arm swing, one step, slide and release into one smooth motion.

The athlete is also introduced to the major source of power, the legs. The one-step delivery represents the final step, or “power step,” where energy is transferred to the ball.

Slide 75: Delivery Types, cont.

One-step Delivery, continued

Skills Taught

- New starting position one and one-half steps behind the foul line
- Adjust foot placement to be two to five inches apart
- Development of the athletic pose
- Coordinate movement of ball swing with step

Slide 76: Delivery Types, cont.

One-step Delivery, continued

Waist Down

- Feet are positioned two to five inches apart with ball-side foot behind the non-ball-side foot
- Hips are lowered to create a posture where the knees will bend forward for balance

Waist Up

- Spine tilted slightly forward
- Head up with eyes on target

Ball Position

- Ball is positioned waist high, just inside the athlete's ball side shoulder

Hand Position

- Hand is positioned with thumb and fingers at a 10 o'clock – 4 o'clock position (hook ball release for right-handed athlete; or 2 o'clock – 8 o'clock position for left-hander)

Slide 77: Delivery Types: One-step Delivery, cont.

One-step Delivery, continued

The Delivery

- Athlete sets up in a relaxed athletic position
- Motion begins with the ball moving forward in a push away motion
- Ball continues motion down and back to the top of the back swing
- As the ball begins downward motion, the athlete will step with the non-ball-side foot
- Ball is released at the bottom of the swing by the non-ball side ankle

Slide 78: Delivery Types, cont. (contains audio)

“Developing a sense of timing is important. Waiting and not taking the step until the reaches the top of the back swing will help the athlete maintain a strong posture to deliver the ball.”

One-step Delivery, continued

Items to watch

- Positioning the feet 2 - 5 inches in the beginning stance presets the athlete's hips and shoulders to be slightly open to the lane
- Key is for the athlete to wait and take the step as the ball starts down from the top of the backswing allowing the shoulders to remain slightly open to the lane
- Stepping forward too early will cause athlete's shoulders to rotate to an excessively open position
- Ball still needs to swing from the shoulder
- Ball is released at the bottom of the swing
- Athlete needs to successfully transfer weight from ball-side foot to non- ball-side foot and establish balance in the finish position

Slide 79: Delivery Types, cont.

Four-step Delivery

The four-step approach is recommended for beginners because it provides a foundation on which to build consistency and accuracy. To this point, the athlete has been working on developing a loose, free arm swing.

On average, it takes four steps for the ball (arm swing) to go through the entire motion: push away, back swing, down swing and release. The four-step delivery offers the best opportunity to develop timing. Timing is the term used to describe the relationship between where the ball is located in relation to the athlete's steps.

Slide 80: Delivery Types, cont. (contains audio)

"On average, it takes 4 steps for the ball to swing down, back and then forward to the release – USBC Coaching recommends utilizing the 4 step delivery for developing the coordination of the movement of the ball swing with the athlete's steps or timing."

Four-step Delivery, continued

Timing

The four-step approach will be represented by numbering the position of the bowling ball in relation to the completion of each step. For example, "position 2:2" indicates the bowling ball is in position 2, during the completion of step 2. Five separate positions are recognized for what we call neutral timing:

- position 0:0 - Athletic Pose (stance)
- position 1:1 - Step one
- position 2:2 - Step two
- position 3:3 - Step three
- position 4:4 - Step four

Slide 81: Delivery Types, cont.

Four-step Delivery, continued

Timing, continued

Athletic Pose (stance): Athlete sets up in a relaxed, athletic position (0:0)

Slide 82: Delivery Types, cont. (contains audio)

"Using excessive force to move the ball forward or over extending the arms fully straight out in front to the body on the first step is not recommended. These actions will alter the body's center of gravity which will disturb the natural balance and motion of the body.

The initial movement of the first step should be just enough to put the body into motion."

Four-step Delivery, continued

Timing, continued

Step 1 of 4: A single one-piece motion describes the ball and ball-side foot moving at the same time during the first step concluding with the ball-side arm (push away) being extended 66% out in front of the body at the end of the first step (1:1)

Slide 83: Delivery Types, cont.

Four-step Delivery, continued

Timing, continued

Step 2 of 4: Ball swings downward in a rounded motion and is by the ball-side leg at the end of the second step (2:2)

Slide 84: Delivery Types, cont.

Four-step Delivery, continued

Timing, continued

Step 3 of 4: Ball continues its motion and is at the top of the back swing at the end of the third step (3:3)

Note: For youth it is acceptable for the wrist to collapse as they may not be strong enough to keep a firm wrist.

Slide 85: Delivery Types, cont.

Four-step Delivery, continued

Timing, continued

Final step or slide: Ball starts into a down swing as the last step begins

Ball is released at the bottom of the downswing by the non-ball-side ankle at the end of the fourth step (4:4)

Slide 86: Delivery Types, cont.

Four-step Delivery, continued

Timing, continued

The previous information regarding ball location relative to each step identifies what is commonly referred to as neutral timing (also known as stroker or textbook). In a perfect world, every athlete would have this type of timing where the ball is in perfect sync with the body and each step.

The reality is that timing is a by-product of an athlete's physical abilities, personality and perception of the sport. When evaluating athletes you will usually encounter different types of timing.

Other types of timing include:

Roller Timing (also known as Early Timing) - where the ball will be positioned ahead of the completed step

Leverage Timing (also known as Late Timing) - where the ball will be positioned behind the completed step

Slide 87: Delivery Types, cont.

Four-step Delivery, continued

Timing, continued

- Examples of Roller (Early) Timing
- Ball starts to move before athlete takes first step
- Ball is coming down from the top of the backswing before athlete starts their last step
- Ball is delivered before slide foot arrives at foul line or is finished sliding

Examples of Leverage (Late) Timing

- Ball starts to move at the conclusion of the first step (Four Step Delivery)
- Ball continues upward motion to the top of the backswing as the athlete starts the last step
- Ball is delivered after the slide foot has come to a complete stop

Slide 88: Delivery Types, cont.

Four-Step Delivery, continued

Release and Follow Through

- During the slide, as the fourth step is completing, the athlete should release the ball as it passes the ankle and follow through in a continuous single motion.

Slide 89: Delivery Types, cont.

Four-step Delivery, continued

Three components to the release

1. As the athlete starts into the slide with the non-ball-side foot in the fourth step, the thumb should release on the down swing. The ball will not fall out of the hand as centrifugal force will keep the ball in the hand on the down swing.

Slide 90: Delivery Types, cont.

Four-step Delivery, continued

Three components to the release, continued

2. The fingers still are firmly in the holes. With the hand in the 10 o'clock – 4 o'clock position (2 / 8 o'clock for left-handers), the ball will receive the rotation from the wrist down necessary to hook slightly into the pins.

Slide 91: Delivery Types, cont.

Four-step Delivery, continued

Three components to the release, continued

3. The fingers release smoothly from the ball as the hand and arm continue arcing out and up into the follow through.

Slide 92: Delivery Types, cont. (contains audio)

“Putting in the time to practice and repeating a desired set of movements is an important part of the learning process.

According to the United States Olympic Committee it takes 1500 repetitions to begin to replace an action or habit.

It should be recognized that Practice does NOT make perfect, more correctly stated, practice will make an action permanent.

Take the time to evaluate your athletes to make sure the skills they are practicing and learning are being properly executed.”

Four-step Delivery, continued

Follow Through

- The follow through should result in a finish position with the hand still aligned to the target line. A follow through is only possible with a relaxed armswing.

Slide 93: Delivery Types, cont.

Four-step Delivery, continued

Finish Position

- When all is said and done, an athlete ultimately needs to complete all their athletic movements ending in a balanced finish position at the foul line. Allowing the ball to stay in sync and within the natural movements of the body will give the athlete the best opportunity to finish in this strong balanced posture while delivering the ball.
- There are several reasons why it is important for the athlete to develop a good finish position, which include:
- Ability to “post the shot” or maintain a balanced position until the ball hits the pins will help the athlete see what path the ball has taken to the pins. This is important for making adjustments and in developing their ability to play the lanes

Slide 94: Delivery Types, cont.

Four-step Delivery, continued

Finish Position, continued

- Excessive body movement or taking a step to catch your balance as part of completing the delivery process does very little to promote consistency or accuracy
- Being solid at the foul line creates a strong leverage position from which the ball may be released. It also reduces the chance for getting injured – short and long term
- The presence of excessive ball movement prior to delivering the ball will increase torque and stress to the body. This unnatural force increases as the athlete attempts to stop and deliver the ball at the foul line

Slide 95: Delivery Types, cont.

Four-step Delivery, continued

Items to watch

- Ball and ball-side foot start together
- Push away motion into down swing is a rounded motion with no pauses or stopping
- Ball is by the ball side leg at the end of the second step
- Ball is at top of back swing at the conclusion of third step
- Ball is delivered at the bottom of down swing by the ankle at the end of the fourth step

Slide 96: Delivery Types, cont.

Four-step Delivery, continued

Items to watch, continued

- Athlete finishes in a balanced finish position
- If the athlete finishes off balance or has a difficult time maintaining their balance look to see if the athlete is muscling the ball swing trying to generate ball speed
- It should be noted that ball speed is transferred to the ball via foot speed tempo and not from the upper body

Slide 97: Delivery Types, cont.

Five-step/Multiple-step Delivery

Although a large number of athletes are taught to use the Four-step Delivery, there will be others who will use five or more steps when making their delivery. This does not mean these athletes are wrong and should be changed to a Four-step Delivery. The coach will need to adjust the bowlers timing to match the style.

When working with athletes who use more than four steps, the information discussed relative to timing (or the ball position for each step) still applies. The difference is that the athlete will hold the ball still during the first step(s) prior to going into last four steps of the delivery. These last four steps will utilize the timing of the four step approach.

Slide 98: Special Concerns (contains audio)

“Ending in a strong balanced posture at the foul line will create the opportunity to make good shots.

Taking excessively short or long steps during the approach and delivery may create problems with posture and balance, as well as timing.

Steps taken should be at a length that closely resembles how the athlete normally walks without a ball.”

Step Length

Check to make sure that the step length matches the swing length. As children grow and their arms become longer, their swing length (arc) increases. As the swing length increases, steps must also lengthen to balance out this motion. If a child grows and does not move back on the approach, the steps will be too short in relation to the swing, and the footwork will look choppy. The posture also may suffer.

A short step with a long swing often makes an athlete lean forward so that the spine angle moves a lot. This makes the head move, which in turn makes it more difficult to keep the target in sight. It also creates a rocking chair motion in

Step Length, cont.

some athletes as they try to get their shoulders back up at the finish. Again, this excess motion makes it difficult to bowl with the most effective motion.

Slide 99: Special Concerns, cont.

The Grip

For youth, it is a good idea to check the grip once a month so that their hands never go too long without attention. Adult hand sizes can change periodically, too. Weight gain and loss will affect the sizes of their fingers and thumb and consequently, the finger holes and thumb holes in their bowling balls will need to be adjusted to ensure a proper fit. Adults should have the grip checked annually.

Items to check: make sure there are no blisters, calluses or pressure points on the hand. Check the hole sizes and the spans. The thumb hole and finger holes should be snug to slightly loose. The span needs to allow the hand to remain in a relaxed position. There are inherent problems with spans that are too short or too long. Make sure your athlete visits a pro shop professional.

Slide 100: Special Concerns, cont.

Wrist Supports

Beginning athletes should use equipment that matches their size and strength.

Youth should use wrist supports as training tools to teach them what it feels like for the wrist to remain still and straight. Muscles will not strengthen if a wrist support is worn all the time.

Exceptions to this would be an individual who has a wrist problem resulting from an injury, or is physically challenged.

Slide 101: Lesson Five: Strikes and Spares

Slide 102: Making Strikes - The Goal of the Game: Strike Pocket

The Strike Pocket

The strike pocket is an area in the pin triangle between the 1- and 3-pins for right-handed athletes and between the 1- and 2-pins for left-handed athletes. Optimally, the ball hits only four pins as it goes through the pin deck.

Slide 103: Making Strikes - The Goal of the Game: Strike Pocket, cont.

Making Strikes – The Goal of the Game

The Strike Pocket, continued

Before delivering the shot, an athlete must map the path of the ball to the strike pocket.

Using the locator dots and target arrows, have your students draw an imaginary line to the pocket or the desired ball path to the pins. It is recommended that beginner bowlers use the second arrow as the target.

Slide 104: Making Strikes - The Goal of the Game: Strike Pocket, cont. (contains audio)

“This concept is taught to beginners to keep them from walking into the natural swing plane of the ball and arm during the approach and delivery.”

The Strike Pocket, continued

Walk Parallel to the Intended Path of Ball

Part of positioning the body on the approach includes envisioning the path of the ball down the lane.

As a continuation of seeing the ball path on the lane, it is recommended that the athlete walks in a direction parallel to the intended path of the ball. This process will improve accuracy as the steps and the ball swing will all be in the same direction.

Slide 105: Making Strikes - The Goal of the Game: Strike Pocket, cont. (contains audio)

“Having your athletes pay attention to where they end up on the approach and to where the ball is rolling on the lane will help them to begin to make meaningful adjustments to play the lanes.”

The Strike Pocket, continued

Have your students make adjustments to the right or left with their feet on the approach to “dial in” to the pocket.

Two points of reference are required in determining the path line:

- Athletes must pay attention to where they are standing at the foul line when releasing the ball.
- Whether they hit the desired target arrow on the lane.

The rule is to always move the starting position on the approach in the same direction that the ball missed the pins.

Slide 106: Making Strikes - The Goal of the Game: Strike Pocket, cont. (contains audio)

“Squaring or aligning back to your original target is an important final part of making this lane adjustment.”

The Strike Pocket, continued

Once the athlete makes the adjustment on the approach from the original starting position, he or she must use the same target as before. If the athlete changes both the original starting position and the lane target, then the ball will take a completely different path down the lane.

Using the same target from a different position on the approach will change the angle that the ball crosses the target and is a true adjustment from the original shot.

A hook ball creates a better entry angle to the pocket and hits the pins in such a way that they will create a perfect “domino effect” to make a strike as described earlier in this lesson.

Slide 107: Making Strikes - The Goal of the Game: Ball Speed

Ball Speed

It is important to have enough ball speed to create good pin action. Increased ball speed, to a point, will create more pin action (pins bouncing off each other and the kickback) and result in more total pin fall.

Remember that ball speed is primarily generated by the lower part of the body or legs and the body’s overall tempo, not by a muscled arm swing.

Slide 108: Spare Shooting (contains audio)

“An important component for being a successful bowler is developing the ability to convert spares.”

Spare Conversions

When the first shot doesn't produce a strike, the next objective is to knock down all the remaining pins with the second ball. Successfully knocking down the remaining pins with the second ball is known as a spare (or a spare conversion).

Beyond the obvious effect on the athlete's score, other major benefits of developing the athlete's ability to convert spares will be an increase in confidence and a decrease in frustration level.

Slide 109: Spare Shooting, cont.

Spare Conversion, continued

The key to success for beginning athletes is the development of a consistent physical game. A consistent physical game will result in the athlete's ability to repeat the same movement and flow when executing the approach and delivery for both strikes and spares. The consistent delivery will help the athlete to use the “3–6–9” spare conversion system, which comprises the following three steps:

1. Determine the key pin
2. Align feet (right or left) on the approach to a new starting position.
3. Square body to point back the original target on the lane.

Slide 110: Spare Shooting, cont.

Spare Conversion, continued

Notice that the key pins are all the pins that the athlete can see.

The 5-, 8- and 9-pins (known as “sleeper” pins), which are located directly behind the 1-, 2- and 3-pins, are not key pins. The lower numbered pins are in the front row, while the higher numbered pins are in the back row. The key pin number will always be the lowest pin number in a spare combination. The athlete must determine which specific pin is the key pin for converting a spare.

Slide 111: Spare Shooting, cont.

Seven Spare Zones

The pins or pin deck are divided into seven specific spare zones. Note that there are three zones to the right and to the left of the head pin.

Converting spares will become a matter of changing the angle of the athlete's strike line on the lanes. The 3–6–9 spare conversion system is based on the concept of changing the ball path angle by having the athlete move a predetermined number of boards to the right or left on the approach for each zone.

The rule to remember is always convert spares by going across the lane.

Slide 112: Spare Shooting, cont. (contains audio)

“This spare shooting system is recommended for beginning bowlers who primarily rolls a straight ball. In keeping with developing consistency of the beginning athlete, the target on the lane will not change when shooting spares.”

Adjustment of Stance

If the head pin or 5-pin is the key pin, the athlete will not need to adjust the starting position.

For key pins to the right of the head pin, the athlete will move the stance position to the left in 3 board increments for each zone.

For key pins to the left of the head pin, the athlete will move the stance position to the right in 3 board increments for each zone.

Slide 113: Spare Shooting, cont. (contains audio)

“The 3-6-9 spare conversion system is not the only system that can be used for converting spares.

However, for the beginner bowler, these moves are enough to create the angle necessary to get the ball into a zone that increases the opportunity to convert spares.”

3-6-9 Spare System

The table shows the recommended adjustments using the “3-6-9” spare conversion system. This table is based on the premise that the athlete is using the 20th board as their starting point on the approach for their strike or first shot.

Slide 114: Spare Shooting, cont. (contains audio)

“Changing the angle that the ball crosses over a target will change the location at which it will enter and travel through the pin deck.”

3-6-9 Spare System, continued

Having adjusted the starting position on the approach, it is recommended that the athlete keep the same strike target arrow used on the first shot.

At this skill level, the beginner athlete will essentially be rolling a straight ball. This straighter ball path plus the 13-inch range that the ball has to cover the key pin will make spare conversions relatively easy.

Slide 115: Spare Shooting, cont.

Seven Spare Zones, continued

Now that the athlete has moved their starting point they will need to face their body towards the original starting target.

The easiest way to accomplish this is to have them slightly turn their heels (pivoting on the toes) in the direction opposite of where they want to roll the ball. The heels should not move more than one board (i.e. one inch).

Slide 116: Spare Shooting, cont.

3-6-9 Spare System, continued

Developing trust and confidence will be one of the most difficult parts of this process. The athlete is now standing on an unfamiliar part of the approach which will create some discomfort, particularly when making the larger nine board adjustment. Work with them to develop their confidence and trust that the system will work.

Practicing different angle changes will increase your athlete’s confidence and ability to play different parts of the lanes.

Slide 117: Spare Shooting, cont.

The 4-7 Spare Conversion

Use the following procedure to line up and convert the 4-7 spare combination.

First, determine the key pin. Remember that the key pin usually will be the one closest to you and will be the lowest pin number in the spare combination. In the case of the 4–7 the 4-pin is the key pin.

Slide 118: Spare Shooting, cont.

The 4-7 Spare Conversion, continued

Next, the athlete will need to change the angle by adjusting the starting position on the approach. Remember that the athlete will always bowl across the lane using this spare shooting method. Since the 4-pin is located two zones to the left of the head pin, the athlete will move six boards to the right. If the athlete is standing on the 20th board for a strike ball, the move will place him or her on the 14th board if right-handed and on the 26th board if left-handed.

Slide 119: Spare Shooting, cont.

“In the case of converting spares for pins that are on the edge of the pin deck, the athlete needs to understand that the ball must travel towards the channel and resist the natural tendency to roll the ball back towards the middle of the lane.”

The 4-7 Spare Conversion, continued

Finally, the athlete must square his or her body back to the original strike target to complete the change of angle the ball will take through this target and down the lane.

Slide 120: Spare Shooting, cont.

The 3-10 Spare Conversion (non-key pin)

Not every spare combination will have a key pin standing that the athlete can align with for the spare conversion. Examples of these spare conversions are the 3–10 and 2–7 spare combinations (sometimes referred to as a baby splits).

Slide 121: Spare Shooting, cont.

The 3-10 Spare Conversion (non-key pin), continued

If we were to select the 3-pin as the key pin, there is a good chance that the athlete would only hit the 3-pin and leave the 10-pin standing. The 10-pin would not be a viable key pin either as it would leave the 3-pin standing.

In this case, the key pin would be the 6-pin. Rolling the ball through the area where the 6-pin was standing will give the ball the best opportunity to hit both the 3- and 10-pins.

Slide 122: Spare Shooting, cont.

The 3-10 Spare Conversion (non-key pin), continued

Next, the athlete will need to change the angle by making an adjustment in the stance. Since the 6-pin is located two zones to the right of the head pin, the athlete will move six boards to the left.

Finally, the athlete squares the body towards the original strike target to complete the angle change. This will allow the bowler to send the ball across the lane without altering their armswing.

Remember that the athlete will always bowl across the lane using this spare conversion system.

Slide 123: Lesson Six: Mental Game Basics

Slide 124: Preparing a Mental Game Plan

Confidence

The majority of mental game focus for beginning bowlers is to concentrate on physical skills for delivering the ball. Until beginning bowlers can obtain a comfort level for delivering the ball consistently without concentrating on specific components of their approach, they must measure their success by how well they learn the physical skills.

The secret to a sound mental game is instilling your athletes with the skill and confidence to succeed. Confidence is the foundation of a winning attitude.

Slide 125: Preparing a Mental Game Plan, cont.

Confidence, continued

You can learn much about your athletes simply by watching them. You must observe them not only when they are bowling, but when they are off the lanes, too. Here are a few things to look for:

- Losing tempers openly
- Losing tempers but not showing it outwardly
- Losing focus and/or concentration (an easy one often see by looking at the athlete's scores)
- Interaction with peers
- Exhibiting a bad attitude when winning or losing

Slide 126: Observation

Addressing Problems

Try to determine the athlete's attitude. This is easier said than done, because sometimes one bowler's attitude is not as obvious as another's.

Watch your team members carefully and listen to what they have to say. Look for negative body language and patterns that indicate an athlete may be troubled. If you detect a problem, take immediate steps to correct it. When you do, don't do it publicly. Your relationship with the athlete must be one-on-one and private. When you find the proper time, simply explain what you see and how it is having a negative effect on the game. Don't make a big deal out of it.

Slide 127: Observation, cont.

Addressing Problems, continued

Develop a plan that will eliminate the problem and, at the same time, let the team know what you expect. Explain to them how they will become better players if they can solve the problem.

Addressing Problems, continued

After you have implemented your plan, be supportive at all times and maintain a positive attitude when you talk with the team member.

Slide 128: Goal Setting (contains audio)

“Establishing goals will create structure, direction and purpose for an athlete. Athlete’s should use the following guidelines to help set-up and achieve their goals.”

The G.O.A.L.S. Acronym

Acronyms help us remember lessons. Let’s begin the discussion on goals by using the acronym G.O.A.L.S. Goals must be:

- Growth focused
- Obtainable
- Action-oriented
- Listed and prioritized
- Specific

Slide 129: Goal Setting, cont. (contains audio)

“An unfortunate truth about our sport is that it is driven and measured by score. Athlete’s just concentrating on throwing a strike will do very little towards developing an awareness of the physical game.

It is important to understand that making a good shot will create the best opportunities of rolling a strike.”

Growth Focused

A goal isn’t a goal if it does not motivate the bowler to improve.

When setting goals, it is essential to strive for improvement in performance or the process of physical action, not the outcome of the action. That is, the athlete must have complete control over the accomplishment of the goal.

Slide 130: Goal Setting, cont.

Obtainable

Obtainable means the bowler must set a goal that is just out of reach and difficult to achieve, but not so easy that it does not present a challenge. If the achievement is perpetually beyond their grasp, it will become a source of frustration rather than motivation.

As mentioned before, setting a goal that is too low also is ineffective. One major reason goals are set too low is because people have a fear of failure.

Slide 131: Goal Setting, cont.

Action Oriented

Emphasize to the bowler that setting goals is not just deciding what is to be accomplished, then waiting for it to happen. A goal's purpose is to motivate the athlete to improve in whatever endeavor they seek. Have them assemble a plan by asking themselves these questions:

- Where can I get instructional material?
- Will I need additional/new equipment?
- Where can I get coaching assistance?
- What can get in the way of my progress?
- How can I measure my progress?
- Am I committed to the process and fully understand what will be necessary to accomplish the goal (frequent practices, coaching, studying, etc.)?

This will allow your athletes to thoroughly think through their plan and know they have successfully accomplished the goal.

Slide 132: Goal Setting, cont. (contains audio)

"Taking time and effort to do this tends to be a strong call to action."

Listed and Prioritized

All goals should be listed and prioritized. "Ink it, don't think it" is a clever phrase that makes a very good point. By having your bowlers write down their goals, they get a clear understanding of what is to be accomplished and it gives them a sense of commitment.

It also allows for reviewing the goals and modifying them when necessary.

Have athletes keep a ledger that fits in their bowling bag, this way they can look at their goals periodically and document any progress or decide on a new goal.

Slide 133: Goal Setting, cont.

Specific

Each goal must be specific and not too general.

When - How long will it take to accomplish the goal (choose a date)?

How - What are the steps necessary to accomplish the objective?

Remember...

Failing to plan is planning to fail. Ensure that bowlers know what is necessary to accomplish their goals.

Slide 134: Self-Talk

Awareness

Observe, listen and make sure your athletes are using positive reinforcement when talking amongst themselves. You can instill a positive attitude in them by promoting positive self-talk and affirmations.

Awareness, cont.

All of us have thoughts that will either encourage or discourage us. These thoughts, which are a person's inner voice, are sometimes referred to as self-talk.

Self-talk can either foretell of future failures (negative self-talk) or lay the foundation for developing greater successes (positive self-talk). The value of positive self-talk can be summed up with the statement, "You are what you think."

Slide 135: Self-Talk, cont.

Awareness, continued

For the most part, individuals will be more critical of their performances and not take the time or energy to recognize any positives. This leads to negative self-talk, which leaves little room for improvement.

It is strongly recommended that coaches maintain a positive approach when working with their athletes. Helping athletes recognize their successes, will help them create positive self-talk statements, which will promote future successes.

Slide 136: Self-Talk, cont.

Signs of Self-Talk

- Self-talk can be identified by:
- Facial expressions
- General demeanor (how do they react after a poor shot?)

Affirmations

- Affirmations are positive self-talk statements
- I can do this
- Make a good shot

Slide 137: Imagery

Positive vs. Negative Imagery

If the imagery is positive, athletes are more likely to enhance their performance than if it is negative.

We have all visualized an error at some time and then proceeded to make it (or watch it) happen!

If athletes are concerned with performance, it is important that they learn to direct and focus on their "human computer." This might take form of parking (clearing the mind of negative thoughts, images and cues) or positive visualization (focusing on performance-enhancing cues, images and behaviors).

Slide 138: Imagery, cont.

Importance of Positive Imagery

Why is imagery important? Positive imagery has numerous payoffs, including:

- Prepares the body and mind for activity
- Facilitates clearing potential
- Helps narrow your focus to the task or relevant cues
- Builds and/or rebuilds confidence and adaptability
- Energizes and/or relaxes, depending on its content
- Is an effective response to worrying

Slide 139: Pre-Shot Routine

Nothing like the Present

There is a natural tendency to over think. Athletes must learn there is nothing they can do beyond the current shot they are about to execute. Further, athletes need to understand that they can do even less about the bad shots they have already made.

The only thing that truly exists is the present. For these reasons, it is important for the athlete to “Stay in the present moment.”

The mind needs to shut down and allow the body to make a good shot – right now. Developing a pre-shot routine will help distract the mind while the athlete prepares to make the delivery.

Slide 140: Pre-Shot Routine, cont.

Business as Usual

A “business as usual” approach will help your athlete continue doing the things that are contributing to success. The pre-shot routine is a specific series of actions that an athlete will go through prior to stepping on the approach. Concentrating on this series of actions will greatly reduce the opportunity for external noise and distractions to creep into the athlete’s mind.

Slide 141: Pre-Shot Routine, cont.

Proper Breathing

During the pre-shot routine, the athlete must remember to breathe properly. When an athlete is competing or if they get nervous, there is a natural tendency to either stop breathing or for breathing to become erratic. Proper breathing will help the body relax while supplying it with the much-needed oxygen required to perform.

Pre-shot routines are used in many sports. It is a great way to help athletes maintain focus and concentration. Work with your athletes to make sure they understand the value of properly preparing to make good shots.

Slide 142: Registered Volunteer Program

The Registered Volunteer Program (RVP) is a background screening process that will:

Ensure that all volunteers who have contact with USBC bowlers are qualified to do so. It includes a mandatory criminal background screening designed to remove and/or discourage those who might harm anyone in the bowling community. Require all Registered Volunteers to abide by a Code of Conduct which defines appropriate and inappropriate behavior. Allow USBC to identify and communicate with thousands of volunteers.

Slide 143: Congratulations! Course Complete

Congratulations on completing the lesson portion of Level I.

We hope you found the materials useful and have learned the skills needed to help beginning bowlers.

In order to experience what a new or beginner bowler feels, we encourage you to practice the skills learned using your opposite hand, a house ball, and rental shoes to get the full effect and gain a deeper understanding of the challenges faced by beginning bowlers.

Visit www.BOWI.com/Coaching for more information on USBC certification coaching programs.

To earn a Level I Coaching certification, you must be RVP approved and purchase then pass the Level I test.

USBC Coaching Certification & Development