

SECTION

8

COACHING AND OFFICIATING OF THROW EVENTS



ACADEMIC AND CAREER PATHWAYS

Coaching and Officiating of Athletics

INTRODUCTION

As we begin Section 8, we will shift our focus to coaching and officiating throw events. This section will provide you with the skills and knowledge to succeed in both roles for events like shot put, discus, and javelin.

Just as you have learned to lead and manage players in net games, you will now explore the unique elements of throw events, which requires a solid grasp of technique, strategy, and fair play.

We will cover the core concepts of coaching and officiating in these events, including the technical aspects of each throw, the rules that govern them, and the important role coaches and officials play in guiding athletes and ensuring fair competition.

Are you ready to dive into the exciting and technical realm of coaching and officiating throw events? Let's get started and discover the skills needed to lead athletes to success in these dynamic and challenging events!

At the end of this section, you will be able to

- Discuss the concepts and principles of coaching and officiating of throw events.
- Put into use the concepts and principles of coaching and officiating in the performance of throw events.

Key Ideas

- **Throw events** are athletic competitions in which participants attempt to throw an object (such as a javelin, shot put, discus, or hammer) as far as possible.
- **Officiating in throw events** means ensuring the rules of the competition are followed. Officials measure throws accurately, check for fouls (a violation of the rules), ensure athlete safety, and make sure the event runs smoothly and fairly for all participants.
- **Coaching in throw Events** involves teaching athletes the proper techniques for throwing objects like javelins, shot puts, or discus. Coaches guide athletes on improving strength, coordination, and accuracy while ensuring they follow safe practices and stay motivated to improve their performance
- The **javelin throw** is a track and field event in athletics where athletes throw a long spear-like object called a javelin as far as possible.
- The **shot put** is a track and field event where athletes throw a heavy spherical object, called the shot, as far as possible.

CONCEPTS AND PRINCIPLES OF COACHING AND OFFICIATING OF THROW EVENTS

Coaching and Officiating Throw Events

Coaching and officiating in sports are important roles that help athletes perform their best while ensuring fairness and safety in competitions.

Concepts and Principles of Coaching Throw Events

Coaching is about providing guidance and technical support to help athletes improve their skills and become the best that they can be. If you have ever been part of a sports team, you know how important coaches are.

The following are some key principles of coaching throws:

1. **Technique grasp:** Coaches concentrate on teaching the right techniques. They start with the basics and gradually move on to more advanced skills. Breaking down the movement into simple phases helps athletes learn better, meaning they can 'grasp' the technique. Coaches use specific drills to help athletes improve in each phase of the throw.
2. **Safety procedure:** Coaches focus on safety measures for athletes and other individuals by maintaining a safe throwing area. They ensure the throwing area is clear and well-marked. Coaches are careful with the handling of the equipment and practice safe throwing practices by athletes. They make sure equipment is in good condition and properly maintained.

Remember: "Safety always comes first!" Being careful with equipment and using the correct technique keeps everyone safe and helps avoid injuries.

3. **Conditioning and strength:** Coaches focus on developing the strength of the athletes' core muscles (i.e. muscles of the abdomen, lower back, pelvis and hips), legs and upper body. They incorporate training activities or drills to improve power, speed, strength and coordination, flexibility, agility and foot positioning which are all important for athletes to throw well.
4. **Providing Feedback:** Coaches give feedback to help athletes improve their skills. There are two main sources of feedback available to the athlete and these are:
 - **Intrinsic feedback:** This is naturally available information from within the athlete.
 - **Extrinsic feedback:** This is additional information to the athlete that can be provided by some external sources such as from a coach, other athletes, spectators, mirrors or from watching a video replay.

5. **Individualised coaching:** Every athlete has unique strengths, weaknesses and learning styles, so coaches modify their coaching strategies and training plans to meet a particular person's specific needs, preferences, characteristics or circumstances rather than applying a one-size-fits-all approach. Coaches tailor their coaching methods to meet the individual needs of each athlete.
6. **Mental Preparation and consistency:** Coaches develop an athlete's mental toughness and focus. They encourage goal setting and mental visualisation of techniques to enhance good performance. Coaches use consistent cues and coaching methods to promote acquiring skills. They motivate regular practice to reinforce technique and build muscle memory.
7. **Competition preparation:** Coaches teach athletes how to handle competition and pre-event pressure. They prepare athletes for various competition situations and environmental factors.
8. **Continuous learning:** A good coach is always learning. They stay updated on modern techniques and training methods and strategies. They support athletes to continually improve and seek opportunities for growth.
9. **Creating fun and enjoyment:** Coaches ensure that training is enjoyable. When athletes enjoy what they do, they are more likely to stay motivated and succeed. A positive experience can lead to long-term participation and success.

Concepts and principles of officiating throw events

An official is an individual who is responsible for overseeing and enforcing the rules and regulations of a particular event, competition or activity. These officials ensure that the event is conducted fairly and in accordance with established guidelines.

Officiating in throw events such as shot put, discus, javelin and hammer throw involves several key concepts and principles to ensure fair and safe competition.

Here are some of the essential concepts and principles of officiating in throw events:

- i. **Practising fairness:** The primary goal of officiating is to ensure a level playing field for all competitors. Officials must enforce rules and regulations consistently to prevent any athlete from gaining an unfair advantage.
- ii. **Ensuring safety:** Safety is of paramount importance in throw events. Officials must ensure that athletes and spectators are safe during competition. This includes setting up appropriate throwing areas, enforcing safety rules and monitoring the competition for any potential hazards.
- iii. **Knowledge of rules and regulations:** Officials must have a comprehensive understanding of the rules and regulations specific to each throw event. These rules cover everything from equipment specifications to proper techniques and fouls. Officials should be able to interpret and apply these rules accurately.
- iv. **Taking accurate measurements:** In throw events, precise measurement of the distance achieved by the athlete is crucial. Officials are responsible for measuring and recording these distances accurately, often using specialised equipment such as measuring tapes or lasers.

- v. **Monitoring markings and fouls:** Officials must closely monitor the athletes to determine whether a throw is valid or a foul. Fouls can occur for various reasons, such as stepping out of the throwing circle or releasing the implement incorrectly. Officials use specific signals and markings to indicate fouls.



Fig. 8.1: Judges Closely Monitoring Neeraj Chopra, Winner of World Athletics Championship 2023 Javelin Throw

- vi. **Timing:** Accurate timing is essential to ensure that athletes do not delay unduly before throwing their implements.
- vii. **Good judgement of throws:** Officials often need to judge the validity of throws in terms of their trajectory, landing position and any potential fouls. They may also need to determine the order of finish when multiple competitors achieve the same distance.



Fig. 8.2: A Judge Having a Good Judgement of Shot Put Thrown by Tomasz Majewski a Former Olympic Gold Medallist – 2008 & 2012.

- viii. **Starting and stopping competitions:** Officials are responsible for starting and stopping the competition, signalling when it is time for athletes to throw, timing the competition and announcing the results.

- ix. **Equipment inspection:** Before the competition begins, officials must inspect all equipment to ensure that they comply with the rules. These include checking the weight and dimensions of implements and ensuring they are in a proper condition.
- x. **Protest resolution:** Officials may need to address protests or challenges from athletes or coaches regarding decisions made during the competition. They must follow established procedures for reviewing and resolving protests.
- xi. **Following the code of conduct:** Officials must maintain a high standard of professionalism and impartiality. They must not show favouritism and must avoid any conflicts of interest. A code of conduct is typically in place to guide officials' behaviour.
- xii. **Effective communication:** Effective communication among officials, athletes, coaches, and spectators is crucial. Officials must be able to convey information clearly and efficiently, especially when announcing results, explaining fouls, or addressing protests.
- xiii. **Continuous education:** Officials must engage in ongoing education and training to stay updated on rule changes, new techniques and best practices in officiating

Activity 8.1

With a partner, discuss the following and make notes below. Be ready to share your ideas with your classmates.

1. Outline three concepts of officiating throws.

- 1.
- 2.
- 3.

2. Note four qualities of an effective/good coach for throws.

- 1.
- 2.
- 3.
- 4.

3. Note four key principles that guide coaching of throw events. How do each of these principles support the development of the athlete?

- 1.
- 2.
- 3.
- 4.

Activity 8.2

Equipment improvisation and inspection

- Look for and gather different types of throw equipment (real or improvised, such as sticks or small balls for javelins or shot puts).
- Conduct a thorough inspection on the items gathered (e.g., check for weight, damage, balance, and safety).
- In a brief report, describe each item gathered and show how it will be used.
- Include in your report why it is important to have standardised and safe equipment for competitions.
- Present your report to a classmate and ask for their feedback, make changes to your report if needed.
- Also listen and provide feedback to your other classmates, after their presentations.

Activity 8.3

Leadership in throw events

- Use your digital device to or school library to research online how leadership qualities are important for coaching and officiating in throw events (e.g., communication, decision-making, and fairness).
- Presentation: Create and deliver a presentation of your findings to your class.
- Class Discussion: After all presentations, engage in a discussion on how leadership plays a role in sports and how you can develop these qualities in your own lives.

Let's now transition from theory to practice. You will have the opportunity to apply what you have learned by taking on the roles of coaches and officials in simulated throw event scenarios. This hands-on experience will help you develop your coaching skills and officiating skills, such as providing technical feedback and enforcing rules to ensure athlete safety.

APPLYING THE CONCEPTS AND PRINCIPLES OF COACHING AND OFFICIATING IN THE PERFORMANCE OF THROW EVENTS

Throw events, such as javelin and shot put, require special techniques and understanding of the coaching and officiating principles. Learning these concepts will help you perform well in these events and also understand how they are judged. Let's explore the steps involved in performing the javelin and shot-put events.

Coaching of Javelin

i. The Grip

The first step to a good javelin throw is learning how to grip the javelin properly. Gripping the javelin correctly allows you to throw with more control and power.

- *Technical characteristics:*

- Thumb and first finger – American grip (1), or
- Thumb and second finger – Finnish grip. (2), or
- Index finger and middle finger – Fork or V grip (3)
- Javelin lays diagonally in the hand.
- Palm faces upward.
- Grip hand is relaxed.



Fig. 8.3: *Javelin Grips*

ii. The Approach Run

This phase involves running towards the target while holding the javelin. The goal is to increase your speed and prepare your body for the throw.

- *Technical characteristics:*

- Hold the javelin horizontally over your shoulder, with the top of the javelin at head height.

- Keep your arm steady (no movement) and start running at your best speed.
- Run on the balls of your feet and let your free arm swing naturally.
- Make sure your hips stay high, and the arm holding the javelin stays flexed.



Fig. 8.4: *The Approach Run*

iii. The 5-stride rhythm phase (withdrawal)

In this phase, you position the javelin correctly for the final throw or delivery.

- *Technical characteristics*
 - Start by landing on your left foot for right-handed athletes (and for left-handed athletes, the right foot starts the landing).
 - Your head should face the target.
 - Your left shoulder should face the direction of throw, while your left arm is held forward for balance.
 - Extend the throwing arm backward during first and second strides.
 - Maintain throwing arm at shoulder height or slightly higher after withdrawal with the javelin tip close to your head.

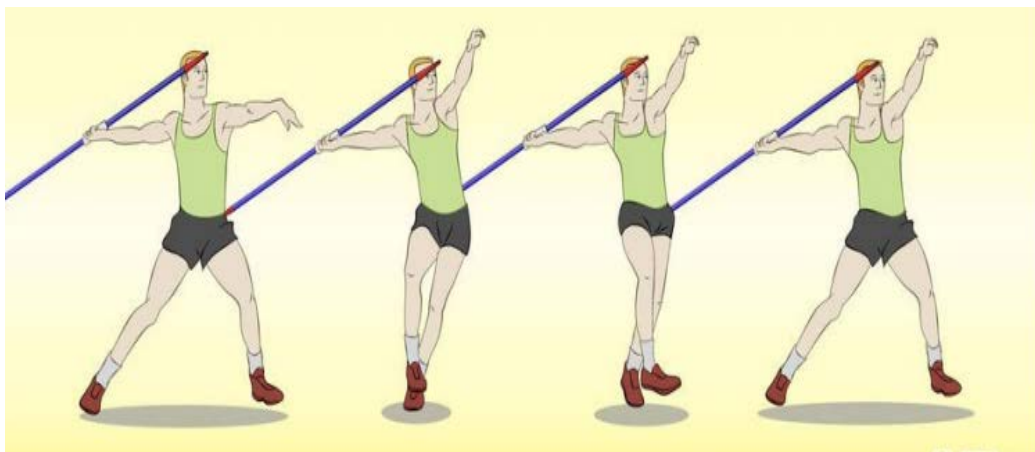


Fig. 8.5: *The 5 – Stride Rhythm Run*

iv. The impulse or pre-delivery stride phase

The objective of this phase is to position and prepare the body for the delivery or throw. This is the step taken just before the javelin is thrown.

- *Technical characteristics:*
 - Drive forward from the whole sole of your left foot.
 - Swing your right knee forwards.
 - Lean your body slightly backwards: legs and trunk 'overtake' the javelin.
 - Left shoulder and head face the direction of the throw (for right-handed athletes).
 - Throwing arm and shoulder axis are parallel.
 - Impulse stride is longer than the delivery stride.

v. The delivery phase

Part 1: Transition:

Now it's time to throw the javelin! This phase transfers energy from your body to the javelin.

- *Technical characteristics:*
 - Place your right foot flat at an acute angle towards the direction of throw.
 - Your legs should overtake your trunk.
 - The axes of your shoulder and hip should be parallel to the javelin.
 - Push your right knee and hip forward.
 - Keep your throwing arm extended.

Part 2: Power Position

The objective at this stage is to transfer velocity from your trunk to your shoulder and arm.

- *Technical characteristics:*
 - Place your left foot active and solid.
 - Stabilise the left side of your body.
 - Raise your trunk with a turning movement around the left leg.
 - Muscles in the front of the body are highly pre-tensed in the 'Arc Position'.
 - Push your throwing shoulder forward.
 - Turn your throwing elbow inward, palm remains up.

Part 3: Final Arm Movement

The objective here is to transfer velocity from the shoulder and arm to the javelin.

- *Technical characteristics:*
 - Draw your right elbow forward and upwards alongside your head.
 - Move your trunk forward.
 - Straighten your throwing elbow explosively.
 - Block the left side of your body by applying a solid left leg and fixing of a bent left elbow close to your trunk.
 - Maintain your right foot in contact to the ground until the javelin is released.
 - Turn right foot on its outside edge and drag it behind. (Image 1).
 - Lean your trunk slightly to the left; with your right shoulder directly over the left foot. (Images 2 & 3).
 - Your throwing arm should be as close to vertical as possible at release. (Image 3).

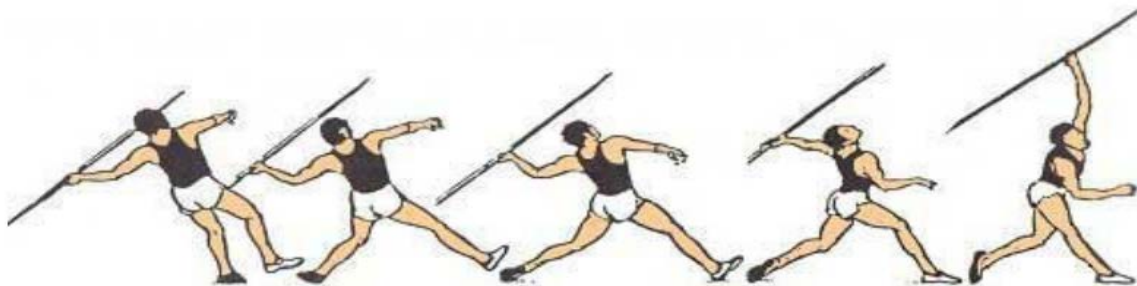


Fig. 8.6: Delivery, Power Position and Final Arm Movement

Note regarding images: The athlete in Fig. 24.5 is using their left hand. All the other images and instructions are from a right-hand use perspective.

vi. Recovery Phase

After the throw, you need to stop the forward movement of your body and avoid fouling.

- *Technical characteristics:*
 - Reverse your legs quickly after the release.
 - Bend your right leg.
 - Lower your upper body.
 - Swing your left leg backwards.
 - Distance from the foot of the brace leg to the foul line is 1.5-2.0m.

Now we've looked at the javelin, let's move onto the technique for the shot put.

Coaching of Shot Put – Linear or Gliding Technique

Shot put is another exciting throw event that requires strength and technique. The glide technique helps you gain momentum and put the shot with more power.

The common phases or techniques used in shot put are:

- Grip
- Preparation
- Momentum Building
- Delivery
- Recovery

1. The grip

The objective is to hold the shot firmly.

- *Technical characteristics:*
 - The shot rests on your fingers and the base of the fingers.
 - Your fingers should be parallel and slightly spread.
 - Place the shot near the front part of your neck, with your thumb on your collarbone.
 - Your elbow should be out at a 45° angle to your body.



Fig. 8.7: Grip and Placement of the Shot

2. Preparation phase

This phase prepares you for the glide.

- *Technical characteristics:*
 - Start upright at the back of the circle, with your back facing the stopboard.
 - Bend your trunk forward and parallel to the ground.
 - Balance on one leg while preparing to glide.
 - Bend your support leg while the free leg is drawn towards the back of the circle. (1 in image 24.8 below).

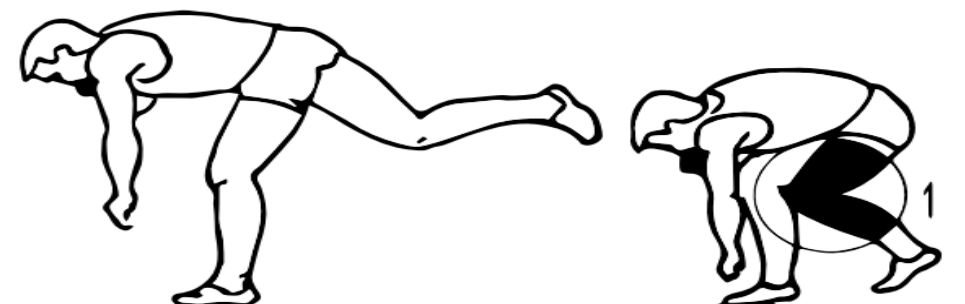


Fig. 8.8: Preparation Action

3. Momentum building or glide phase

Here, you initiate acceleration and position the body for the final putting action.

- *Technical characteristics:*
 - Push from your forefoot to your heel.
 - Drive your free leg low towards the stopboard.
 - Your support leg should maintain contact to the ground throughout the glide.
 - Keep your shoulders square to the rear of the circle. (1 in image 24.9 below).

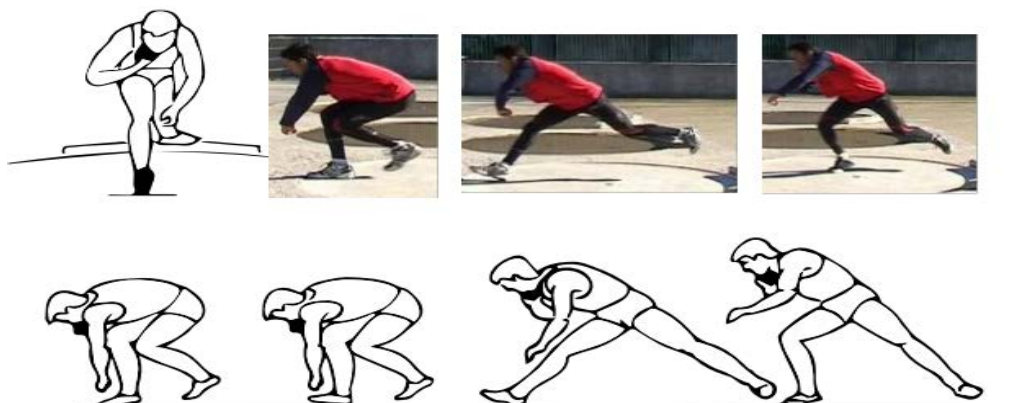


Fig. 8.9 : Momentum building

4. Delivery phase – The power position

The objective is to maintain the speed of the shot and begin its main acceleration.

- *Technical characteristics:*
 - Carry body weight on the ball of the right foot, with the right knee bent.
 - Place the heel of the right foot and the toe of the left foot in line – ‘Heel-Toe Position’.
 - Twist your hips and shoulders.
 - Lock your head and left arm back.
 - Keep your right elbow at a 90o angle to the trunk.



Fig. 8.10: Delivery phase- The power position

5. Delivery phase – Main Acceleration

Now it's time to put all your energy into throwing the shot.

- *Technical characteristics:*
 - Twist your right leg explosively, so your right hip faces the front of the circle.
 - Your left leg is almost extended and braced, lifting the body – and influencing the angle of release.
 - Block trunk's twisting movement by the left arm and shoulder.
 - Turn your right elbow and raise it towards the direction of the throw.
 - Transfer your body weight from your right leg to the left leg.

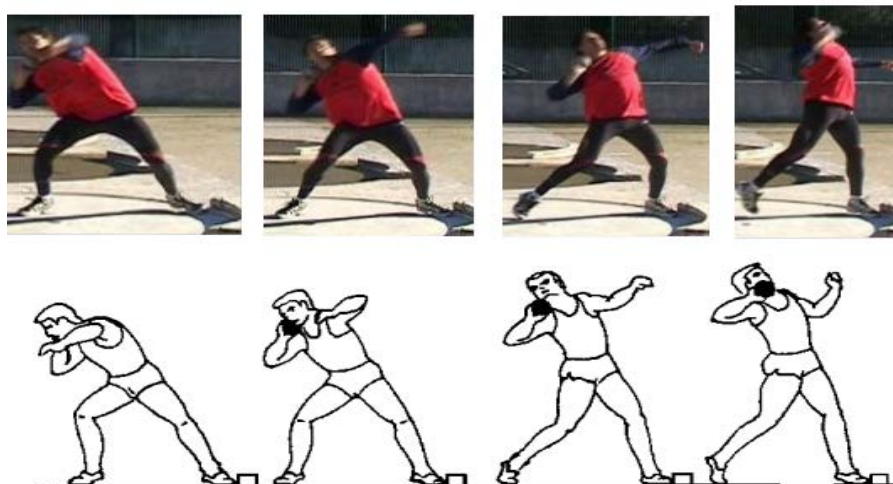


Fig. 8.11: Delivery phase – Main Acceleration

6. Delivery phase – Final arm movement

The objective is to transfer velocity from the thrower to the shot.

- *Technical characteristics:*
 - “Strike” of your putting arm begins after full extension of the legs and trunk.
 - Bend your left arm and fix it close to your trunk.
 - Continue acceleration with the pre-stretched wrist (thumbs down, fingers turning out after the release).
 - Keep feet in contact with the ground for the release.
 - Keep your head behind the left-bracing-foot until the release.



Fig. 8.12: Delivery phase – Final arm movement

7. Recovery phase

After the throw, stabilising yourself is important.

- *Technical Characteristics:*
 - Reverse your legs quickly.

- Bend your right leg
- Lower your upper body.
- Allow your left leg to swing back naturally.



Fig. 8.13: Recovery phase

“Remember, every effort counts! Consistency is key, and with each practice, you’re getting stronger and better.”

Key officials -Their roles and positions

i. Shot Put

- *Chief Judge:* Oversees the entire event, ensuring it runs smoothly. Usually positioned near the throwing circle to observe athlete conduct and ensure safety.
- *Assistant Judges:* Assist with measurements and ensuring compliance with rules. Positioned in and around the throwing sector to mark the landing point and measure throws.
- *Recorder:* Keeps track of the results, recording distances and fouls. Typically positioned at a table near the throwing area.
- *Sector Judges:* Positioned at each boundary of the throwing sector to observe and mark foul throws, ensuring athletes stay within the designated area.

ii. Javelin

- *Chief Judge:* Supervises the event and ensures safety. Positioned near the runway to observe athletes’ approach and release technique.
- *Assistant Judges:* Assist with measuring distances and verifying valid throws. Positioned along the throwing sector, usually near the landing area, to measure distances and mark landing points.
- *Recorder:* Responsible for record-keeping, documenting distances and fouls. Typically positioned near the start of the runway or at a table close to the throwing sector.
- *Sector Judges:* Positioned at key points within the sector to monitor foul throws and ensure that the javelin lands within the designated boundaries.

Whether you're learning to throw or to judge, every role is essential to the success of the event. Keep striving to be your best, both in performance and knowledge!

Keep practicing, keep pushing, and keep aiming higher. Mastering these events takes time, but every step forward is a step closer to greatness. You're doing fantastic—keep it up!

Activity 8.4

Javelin and shot put phases

Materials needed: Projector or tablet for visuals, markers for stance positions, training javelins, shot puts, cones and measuring tapes).

Phase 1:

- Look at pictures and watch short videos of the phases of javelin and shot put throwing using online tools.
- Based on your observation, physically demonstrate these phases.
- Perform the complete sequence of movements in front a classmate, receiving peer feedback.
- Through demonstration and peer analysis, visualise and physically experience the movements.

Phase 2:

- Your teacher will set up stations to practice the different throw phases of both javelin and shot put.
- Each station will focus on one phase, such as grip, approach, delivery, and recovery.
- Rotate between stations to master each step before attempting a full throw.
- Practice specific phases to refine your technique.
- Receive feedback from your 'coaches/classmates' and incorporate this into your practice.

Note: *Visual and physical practice is crucial in mastering athletic techniques, just as real athletes receive feedback from coaches.*

Activity 8.5

Rules and regulations

Materials needed: Digital devices for research, notepads for jotting down findings.

- Research online or use the school library the specific rules for javelin and shot put.

- Share your findings first with a partner and then with the larger class.
- Reflect on how these rules ensure fairness and safety in real competitions.

Based on your research, can you answer the following question? Note your answer below.

Question: Two athletes have a 'tie' after a javelin throw during the annual inter-house sports festival in your school. Outline steps you would use to resolve the 'tie'.

To resolve the tie, I would:

Note: *Officiating in real competitions requires an understanding of rules to ensure a fair playing field and to uphold the integrity of the game.*

Activity 8.6

Peer coaching for improvement

- In pairs, one as a coach and one as an athlete, work with your partner to improve their technique and confidence in throw events.
- Coaching Plan: Create a mini-training plan together based on the athlete's strengths and areas for improvement (e.g., improving grip or release).
- Coaching Feedback: As the coach provide consistent feedback during practice throws, focusing on one specific area at a time (e.g., stance, technique, release etc) to your partner
- Progress Check: After a few rounds, switch roles and reflect on how your coaching has improve your partner's performance.

Activity 8.7

Digital portfolio of throw events

Materials needed: Tablets or computers, digital recording devices.

- Create a digital portfolio that includes your research on rules, personal reflections on learning, videos of your throwing techniques, and notes on officiating roles.
- Share your portfolio with peers or upload it to a class platform.
- Reflect on your learning and document this as part of your progress.

Top tip: *Athletes and coaches often keep video logs of training sessions to track their improvement.*

Activity 8.8

Class throwing tournament

Materials Needed: Javelins, shot puts, cones for marking sectors, measuring tapes, clipboards, trophies or certificates for awards.

This activity should be completed in groups.

Your group is going to organise and compete in a class throwing tournament.

- Your teacher will assign your group with a specific role (e.g. officials, organisers).
- Using the rules and principles you have learned, make a plan to prepare for the tournament.
- Share your plans with your classmates. Based on their feedback, is there anything you have missed? Add this to your plan now.
- In a fun but competitive environment, take part in the throwing tournament. Each group should have a chance to compete as an athlete and officiate the event.

Reflect on the tournament. What did you enjoy? What would you change? Note your thoughts below.

Review Questions

1. Joel is a new athlete learning shot put. His coach, Mr. Edward, starts by breaking down the technique into phases and asks Joel to focus on the glide technique. After several practice sessions, Mr. Edward notices that Joel is struggling with his footwork but has improved his upper body strength. Mr. Edward provides feedback to Joel and encourages him to practice footwork drills.

Question: Based on this scenario, identify two coaching principles Mr. Edward is applying and explain how they benefit Joel's progress.

Coaching principles Mr. Edward is applying:

2. Evaluate the impact of an official's knowledge of throw event rules and regulations on the success of a competition. How does this knowledge affect the fairness of the event and the satisfaction of athletes and spectators?

3. Critically assess how proper equipment inspection by officials contributes to the fairness of a throw event. What are the potential consequences if officials fail to check equipment properly before competitions?

4. Complete the table by describing the main actions during each phase of the javelin and shot put throws.

Phase	Javelin Throw	Shot Put
Grip	Firm grip with thumb and fingers wrapping around the javelin.	Shot held at the base of the fingers, not in the palm.
Approach/ Preparation		
Withdrawal/ Momentum		

Delivery		
Recovery		

5. Match the correct officiating role with their responsibility in javelin and shot put events.

Role	Responsibility
Chief Judge	A. Records the distances and fouls of each throw
Assistant Judge	B. Ensures the throw lands in the correct sector
Recorder	C. Supervises the overall event and ensures that it runs smoothly
Sector Judge	D. Helps in measuring throws and ensures athletes follow the competition's rules

6. The delivery and recovery phases are crucial for a successful throw in both shot put and javelin. How does proper body positioning during delivery ensure better recovery in both shot put and javelin?

Analysis of Delivery and Recovery Phases

7. As an official in a local athletics competition, you are responsible for ensuring that the javelin event runs fairly and safely. One of the athletes continually argues with the officiating decisions, disrupting the event.

How will you manage this situation to maintain the integrity of the event while respecting the athlete's concerns?

8. Discuss how the rules and regulations in officiating javelin and shot-put throws contribute to the fairness and safety of the sport. Why is it important for athletes to follow these rules?

EXTENDED READING

1. This link below provides additional information on the coaching and officiating of throws



<https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.scottishstudentsport.com/sports/coachingandofficiating/&ved=2ahUKEwiH9pCtrlIAxU-gf0HHRWqBkYQFnoECBQQAQ&usg=AOvVaw20qTNV3Zq4spO3LyzWdAtX>

2. The link below will help you coach the glide shotput to beginners



<https://youtu.be/GoNCeg3Xyk8?si=lnJLDGerBbv2J0ST>

3. Watch these links on the throwing sequence in shot put



<https://youtube.com/shorts/9e-A-zTzk8Y?si=cWQ0lw171ZFkZTwl>



https://youtube.com/shorts/YRd78P2w3Rs?si=V9phXpHVIvlnN-_

4. The following articles are a good source of information on officiating throw events



https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=http://akilaavinuty.blogspot.com/2020/03/scientific-principles-of-officiating.html&ved=2ahUKEwi99--DlLiIAxXV8rsIHxGVBu0QFnoECC4QAQ&usg=AOvVaw3SrFlg3TGNxhC8_hPDJHSS



https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.academia.edu/38771732/LET_Santarin_Coaching_and_Officiating_with_TOS&ved=2ahUKEwi99--DlLiIAxXV8rsIHxGVBu0QFnoECBkQAQ&usg=AOvVaw2iGIdvqb7Q1e9XZQK7yZFe

5. The links below outline the rules for javelin and discus
- Javelin



<https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://olympics.com/en/news/javelin-throw-rules-regulations-and-all-you-need-to-know&ved=2ahUKEwjf9Ynl9rqIAxWr9LsIHTz7BGoQFnoECAoQAQ&usg=AOvVaw00fkJX2MxDqsI3e8DXOpLA>

- Discus



https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.dsbn.org/uploadedFiles/DSBN_Main_Website/Athletics/Secondary/Track_and_Field/Shot%2520Put%2520Official%2520Notes.pdf&ved=2ahUKEwiz9-2e9rqIAxVfhf0HHeJRHRQQFnoECBEQBg&usg=AOvVaw3g3ImmiZ984KAZ3ioJpoI4

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7. Brainly: <https://brainly.in/question/7910879>
8. BrianMac: Sports Coach (2023): <https://www.brianmac.co.uk/javelin/index.htm>
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