Inclusive Game Design Project

A1: Explain and justify the need for a solution

In many school sports activities, students of different abilities may feel excluded or overwhelmed due to the rules or physical demands of the games. Traditional games like football and basketball can be competitive and skill-based, which can make it difficult for all students to feel confident, included, or actively involved.

There is a clear need for a new game that merges familiar skills from both sports while focusing on inclusion, adaptability, and cooperation. By designing a hybrid game that combines elements of basketball and football and includes adaptable rules, equipment modifications, and progression strategies, we can create a more welcoming and fun experience for everyone, regardless of their skill level.

This inclusive game will allow students to participate more equally, build confidence, and develop a sense of teamwork and community, which aligns with the values of both Physical and Health Education (PHE) and Design.

A2: Identify and prioritize primary and secondary research Primary research:

Surveyed classmates through a questionnaire about what makes games fun or frustrating.

Questionnaire Topics:

- Pros and cons about basketball and football
- Rules that could make the game more fun
- Preferred scoring method (e.g., goal, throw, tag)
- Preference: indoor or outdoor play

Summary of Findings:

Topic	Insights from Responses
Pros of basketball	Passing, shooting, arm exercise, teamwork, fun to play
Cons of basketball	Makes hands dirty, tiring, physical contact issues
Pros of football	Leg movement, cool tricks, passing, strategies
Cons of football	Risk of getting kicked, physical roughness
Fun rule ideas	Tagging players, fair play, soft gameplay, more steps allowed
Scoring preference	Mixed opinions – some prefer tagging, some like kicking into a goal, others like shooting/throwing
Location preference	Mixed – many preferred indoors for comfort and safety, others liked outdoors for space

Conclusion Based on Questionnaire:

- The **new inclusive game** should include a balance of skills from both basketball (e.g., **passing and shooting**) and football (e.g., **kicking**).
- Students enjoy tag-based elements, so including tagging as part of gameplay could increase fun.
- Safety is important: players want rules that avoid physical harm, such as:

- No aggressive kicking
- Soft and respectful play
- Balanced teams (not stacking skilled players on one side)
- Equipment and rules should be flexible and adjusted based on the players' skill levels.
- This student feedback gave me direct insight into what players enjoy and what should be avoided, helping me design a more **inclusive**, **fair**, **and enjoyable** game.

• Secondary research:

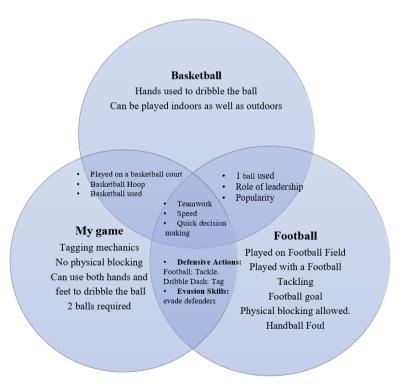
- Researched existing inclusive sports and modified games.
- Looked into official rules for basketball and football to understand the core mechanics of each.

A3: Analyze Existing Products

To gather inspiration and guidance, I analyzed several existing inclusive games, focusing on how they balance skill, teamwork, and fairness. These games often feature simplified rules, clear player roles, and objectives that promote cooperation over competition. By studying these examples, I learned that successful inclusive games:

- Use straightforward, easy-to-understand rules.
- Clearly define roles to support all ability levels.
- Encourage teamwork rather than individual performance.
- Minimize elimination so everyone stays involved.

To visualize these insights, I created a Venn diagram comparing basketball, football, and my own game. The diagram helped me identify key characteristics that I wanted to incorporate into my game, such as:



This analysis, combined with the Venn diagram, helped shape my game by emphasizing

accessibility, enjoyment, and active involvement for all players.

A4: Develop a design brief

A hybrid game will be designed that combines fundamental skills from both football (like passing and footwork) and basketball (like dribbling and shooting) in a way that is inclusive and adaptable for students with different abilities. The game will feature flexible rules to match different skill levels, modified equipment to make the game safer and more accessible, a clear skill progression guide for learning and improving, and strategies to ensure balanced participation. The design will promote teamwork, fairness, and enjoyment while keeping students active and engaged.



? Criterion B: Developing Ideas

B1. Develop Design Specification

Specification description
Suitable for all students regardless of skill level.
Tagging only allowed, no physical contact.
Rules are easy to learn and follow.
Keeps all players active and participating.
Can be played indoors or outdoors.
Focuses on dribbling, agility, and spatial awareness.
Uses basic pe equipment like basketballs and cones.
Rules allow different roles for varied skill levels.

B2. Generate a Range of Ideas

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Idea #	Description	Key Rules	Scoring System	Unique Twist		
1	Game played on a basketball court involving tagging opponents in the central zone	Tag opponents in the central zone to score; ball can be passed by kicking	+Points for tagging, -2 points if opponent gets hurt	Passing by kicking instead of throwing		
2	Game played on a soccer field where each team has its own ball to score a goal on the opposite side	Move your ball to the opposing goal while avoiding getting tagged	Winning team is the first to score without getting tagged	Each team has its own ball; tag- based interference		
3	Indoor game with a light leather ball and tag zones	Players move the ball across while avoiding tags in certain regions	Likely point- based on successful crossing	Tag zone in specific regions adds strategy		
4	Basketball + football hybrid with tagging and penalties	Dribble like basketball, pass and score like football; tag to send opponents to a penalty box	Not specified; penalty and scoring system implied	30-second penalty box via tag; multi- sport mechanics		
5	Deception game with real and fake balls	Only referee knows real ball; tagged players learn but must stay silent	Likely score using real ball; deception adds depth	Referee-controlled truth, silent knowledge after tagging		
6	Basketball court game with tagging and shooting	Score by tagging or making 3-point shots only	Points from tags and successful 3-pointers	Only 3-point shots count — strategic scoring		
7	Dribble-based tagging game on a basketball court	Players must dribble into opponent's paint while avoiding tags	Score by reaching the paint safely	Emphasizes dribbling under pressure and defensive tagging		
8	Accessibility-inspired football goal game	One team rolls footballs from penalty box; opposing team defends	Score by rolling footballs into goal	Rolling mechanic; inclusive gameplay design		
9	Chain-formation game with team sabotage	Team must form an unbroken chain to score; teammates can break chain from the middle	Must restart chain if broken	Physical coordination + internal sabotage twist		

B3. Develop a Final Chosen Design

% Game Title: Dribble Dash

© Objective

Each team must dribble a basketball across to the opponent's paint (key area) without being tagged by defenders. Points are awarded for each successful dash through the paint. The team with the most points at the end wins.

11 Teams

- Two teams of 5–7 players each.
- Divide players equally

Skills Developed

- Dribbling under pressure
- Agility and evasion
- Defensive positioning
- Teamwork and spatial awareness
- Decision-making and timing

Equipment Needed

- Basketball court
- 2 basketballs (1 per team)
- Whistle and stopwatch

Setup

- Each team starts on their own half with a basketball.
- The paint area (key) on the opposite side is the goal zone for scoring.
- Tagging is only allowed when players enter the opponent's half.

Rules

1. Dribbling Required

Players must continuously dribble the basketball when moving. If they stop dribbling, they return to their side and restart.

2. Tagging Mechanics

Defenders (players on their own side) may tag any opponent entering their half.

 \circ Tag = Out \rightarrow Tagged players return to their side and try again.

3. Scoring a Point

A player scores 1 point for their team if they dribble into the opponent's paint area without being tagged. After scoring, they return to their side.

4. Team Play

Multiple players can attack at once to create distractions and confuse defenders.

5. Time Limit

The game can be played in 2 halves of 10 minutes, or a total of 20 minutes.

6. No Physical Blocking

Defenders may only tag, not block or hold players.

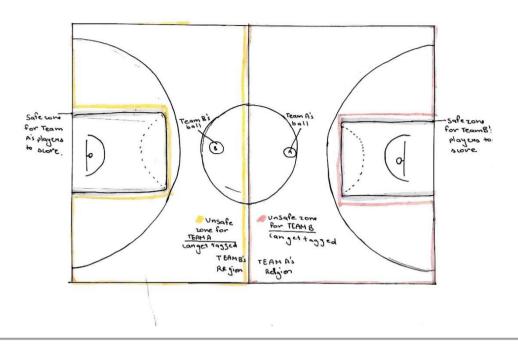
M Gameplay

- Players dribble into the opponent's paint to make a shot and score 1 point.
- Defenders tag attackers in their half.
- Tagged players return and try again.
- Team with more points wins!

Safety Tips

- Use soft tags (like touch on shoulder).
- Encourage sportsmanship.

• Referee or teacher supervises fairness.



Crest Prison - A Strategic Tag & Goal Game

The earlier game concept was my own idea, and this version is a collaborative idea developed with my group.

Objective

Two teams compete to score by kicking or throwing a ball into the opposing team's goal while navigating a tag-based challenge. Players must avoid getting sent to "jail" while attempting to free teammates and score points.

Game Setup & Materials

- A soccer field
- Goals: 45*45 squares tied to the sides of a soccer goal
- Safe Zone: Marked by cones, forming a triangle (players here cannot be tagged)
- Jail: Similar to "Capture the Flag" jails, located on each team's side

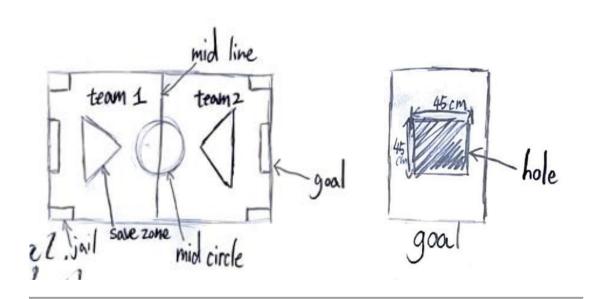
Rules & Gameplay

- 1. **Teams:** Two teams compete in the game.
- 2. **Movement & Tagging:** Players must avoid being tagged by the opposing team. If tagged, they go to jail.
- 3. **Freeing Teammates:** A teammate can enter the opposing team's jail zone and tag their imprisoned teammates to free them.
- 4. **Ball Control:** Players can kick, throw, catch, and save the ball but cannot influence it while in jail.
- 5. **Scoring:** A team scores by successfully throwing or kicking the ball into the opponent's goal.

- 6. **Boundaries:** If the ball goes out of bounds, the other team gains possession. Touching the boundary results in being sent to jail.
- 7. **Jail Rules:** Only six players (three from each team) can be in the middle circle at a time. Players go to jail if they:
 - Get tagged
 - Step out of bounds
 - o Break any other rule

Skills Required

- Kicking
- Throwing
- Dodging
- Strategic Movement



Criterion C: Creating the Solution

1. Construct a logical plan

We first created a step-by-step plan to set up and play the game:

- 1. Choose teams.
- 2. Set up the play area (including hoops or rings).
- 3. Explain the rules: avoid getting tagged, how to get sent to jail, and how to free others.
- 4. Begin the game.

2. Demonstrate technical skills

During the activity:

- We set up the equipment efficiently and explained the rules clearly, after sometime re explained the gameplay to ensure the game went on smoothly.
- We managed the players, maintained safety, and ensured fair play.
- Adjustments were made on the spot when players were unsure or confused, showing

- adaptability.
- We used hula hoops, instead of the squares because they were easily available and easier to use.

3. Follow the plan to make the solution

The plan was followed well:

- The game ran smoothly from setup to finish.
- All players understood the basic rules.
- We made small changes based on the environment (e.g., adjusting hoop positions), which helped improve flow.

4. Justify changes made to the design

During the game, we:

- Modified the use of hoops instead of the squares.
- Re-explained the game rules better after confusion.
- Allowed flexibility in the rules to keep the game engaging.

These changes were necessary to improve the experience and make the game more enjoyable.

Criteria D – Evaluation Summary & Reflection

After conducting two rounds of feedback surveys for the game *Crest Prison*, we received helpful insights from players that helped me evaluate the effectiveness, enjoyability, and fairness of the game. Here's a summary of what I learned and how I plan to use the feedback to improve the game.

What worked well

- Most players said they enjoyed the game, especially moments that were unexpected or funny, like when "everyone was confused."
- The "pass the ball" element was also highlighted as enjoyable, showing that interactive, team-based challenges were a strong point.
- Several players said they felt the game was interesting or exciting, meaning it managed
 to keep their attention even if some parts were confusing.

Areas for improvement

- A common suggestion was to **adjust the hoop or triangle size**, as these game elements may have been unclear or difficult to interact with.
- Some players felt the game was too long, which suggests that shortening the duration or improving pacing might make the game more enjoyable.
- There was **confusion about the rules** or objectives for some players, which could affect how fair or competitive the game felt.

Fairness and Challenge

- The responses were mixed about whether the game was fair or if everyone had an equal chance to succeed. This might be due to unclear instructions or certain players having more advantages (e.g., proximity to the hoop or triangle).
- While some found the game challenging in a fun way (e.g., avoiding other players), others were unsure or didn't find it difficult at all.

Next Steps

- Clarify the game rules before starting to reduce confusion and ensure everyone knows how to play.
- Modify the triangle/hoop size or placement to improve accessibility and fairness.
- Shorten the overall game length or break it into smaller rounds to maintain high energy levels.
- Possibly include a "jail" mechanic revision, as one player disliked spending too much time in jail.