

Ask & Learn

Background and History for your Game Research

Lesson designed by Kathryn Rulien-Bareis

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Week One

Types of Game Designs

Game Categories

- Action games
- Adventure games
- Role-playing games
- Simulation games
- Strategy games
- Sports games
- Puzzle games
- Skill/chance
- Board Games (race, space, chase, displacement)
- Memory
- Category
- Kinesthetic
- Music, Song
- Rube Goldberg (like Mouse Trap)

Games can improve coordination, problem-solving skills, memory, attention & concentration, cognitive skills, multitasking as well as improve social skills.

Images from Pixably.com



Elements of Game Design

- Goals and objectives
- Rules, Instructions, # of players
- Interaction
- Conflict (and/or competition, challenge, opposition)
- Outcomes and Feedback



Learning More About Games

Who invented games?

Indoor games

- I spy (England)
- Hide-and-seek (Greece)
- Musical chairs (New York, USA)
- Scavenger hunt (ancient folk games)
- Charades (France)
- Scrabble/Boggle (New York, 1930s)
- Pictionary (Seattle, 1980)
- Solitaire card game (Lady Adelaide Cadogan, 1870)

While you are thinking about which games you will be playing for research, don't forget about sports games. While in social distancing a son and his mother invented this game. You could redesign this for your game design

<https://youtu.be/yUKk5e9cStQ> (Links to an external site.)

Playground Games

- Hopscotch (Great Britain)
- Jump rope (China & Egypt)
- Kick the Can (US 1930's)
- Capture the Flag (historical battlefields)
- Jacks (Egypt)
- Marbles (Egypt, Central Mexico)
- Red Light Green Light (?)
- Simon Says (13th century)
- Tag, Frozen Tag, Shadow Tag, TV Tag (?)
- Marco Polo (China)
- Red Rover (United Kingdom)
- Button, Button, Who's Got the Button? (?)
- Cat's Cradle (China)
- Telephone (China)

Native American Games

Native Americans used games to teach their children safety, strength, agility, and sportsmanship. The games were fun, but they had purpose. The game of Sep, the Toe Toss game, the Hand Game, the Snow Snake game and other games listed below are real Native American games that you can play at home or at school.

<https://nativeamericans.mrdonn.org/games.html>

Hispanic/Latino Games

Pirinola is a traditional game played with a wooden chip. It has 6 sides with instructions on each side.

Mar y tierra is a simple game and can be played outside. Click on this link to see videos of the game.

<https://www.spanishplayground.net/hispanic-heritage-month-games/>



Hmong Games

Dhia Yas often called Hmong Jump Rope. This game consists of a single rope made of rubber bands. Two players each hold an end of the rope, as other players jump over. The game gets more difficult as the rope is raised higher and higher. There are several techniques used in jumping over the raised rope, such as jumping with a kick and spin or even a cartwheel.

African Games

Mancala is a board game that is played worldwide. Ampe from Ghana is similar to Rock, Paper, Scissors except kids use their entire body.

<https://africa.com/best-african-games/>

Historical Facts

- “Ring Around the Rosie” is a song game from the Great Plague of London in 1665.
- “London Bridge”, children’s singing game, refers to the historical bridges in London.
- ‘Classical’ board games are divided into four categories of game – race games (such as *Pachisi*), space games (such as *Noughts and Crosses*), chase games (such as *Hnefatafl*), and games of displacement (such as chess).
- Board games have been played, travelled and evolved in most cultures and societies throughout history.
- The game of checkers finds its roots in the ancient north Africa game of *Zamma*, whilst a version called *Fanorona* has long held popularity in Madagascar
- Chess originated in India

Oldest Game Senet

Firstly, you throw the sticks and for every stick that lands facing upwards you can make one step around the board. (There are four sticks, if, none land facing up, you can make five moves.)

After the number of moves have been established you can start moving your pieces and each piece can move to an empty square or a square occupied by an opponent piece, in this case the two pieces switch positions. When two pieces of a player are adjacent to each other, those two pieces are safe and cannot be swapped. When 3 pieces are adjacent to each other, the pieces of another player cannot pass through them.

The last 5 squares are special squares, a piece is always safe on a safe square and will not be swapped, the fourth last square is the water square, when a piece lands on it, it must start from the beginning again. An exact throw is needed to leave the board.

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Game Design as a Career

<https://www.uwstout.edu/programs/bfa-game-design-and-development-art?creative=250998545227&keyword=game+design+university&matchtype=b&network=g&device=c>

Week One Learning Target

Ask & Learn about Game Design

This Week's Assignment will help you discover games and the historical/cultural background.

Here are your steps:

1. Ask a family member to name their favorite game. Don't forget you can call a grandparent, aunt, uncle, cousin.....
2. Read and learn *Background and History* about Games (pages 1-3). You will be researching your game options.
3. Decide if you will play alone or with another family member.
4. Play at least 3 DIFFERENT games. Play one game you have never played before.

What to Turn In?

You will need to submit your answers to the following reflection questions.

1. List the favorite game that your family member told you about.
Describe the games you played.
2. What did the games have in common?
3. How were the games different?

If you are interested in Rube Goldberg designs, here's a challenge for you. Can you design a machine that could drop a bar of soap into your hand in 10 or 20 steps? Here's the link to this challenge.



<https://youtu.be/uDVI5zSyZsc>

Imagine & Design Your Game

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1. WHERE TO BEGIN?

This week is an exciting week! You will use your game playing skills to take an existing game and recreate it. Keep in mind that board games are just one type of game that you could be redesigning.

Step 1 Start with your passion. What type of games are your favorite?

- Action games
- Adventure games
- Role-playing games
- Simulation games
- Strategy games
- Sports games
- Puzzle games
- Skill/chance
- Board Games (race, space, chase, displacement)
- Memory
- Category
- Kinesthetic

Game On!

2. DECIDE ON YOUR GAME

Step 2 Next, you will need to use your creativity!

- How will you change this game to make it more modern?
- Will you change the theme?
- Change the game pieces?
- Change the number of players?
- Change the objective of the game?
- What is the purpose of your game?
- Is your game for improving coordination, problem-solving skills, memory, attention, concentration, cognitive skills, multitasking or improve social skills?

3. BUILD YOUR GAME

Step 3 The building blocks of all games include the following 5 parts. You will need to these within your game.

- **Goals and objectives**
- **Rules, instructions, # of players**
- **Interaction of players**
- **Conflict, competition, challenge**
- **Outcomes**

4. GATHER YOUR MATERIALS

Step 4 This part of your work will be a bit of a scavenger hunt. You will be using materials that might be recycled pieces. You may want to collect more than you need and then toss them when you are finished designing your game.

POSSIBLE MATERIALS:

- Caps, covers
- little objects for game pieces
- Balls, marbles, rocks, buttons
- Cards, dice, toys
- String, yarn
- Containers
- Cereal boxes, cardboard
- Wrapping/scrapbook paper

POSSIBLE TOOLS:

- Scissors
- Markers, or crayons, or pens/pencils
- chalk
- Tape or glue or glue stick
- stickers

What to Turn In?

Your Learning Target for this week is to Image and Design your game idea.

You will need to submit written answers to questions 1-3 and a photo of 4.

1. THINK OF YOUR MOST FAV GAMES.

Use the list above to answer this question.

2. CHOOSE A GAME TO REDESIGN.

Use the questions above to answer.

3. BUILD YOUR GAME.

Describe the 5 building blocks for your game.

4. GATHER YOUR MATERIALS.

Take a photo of the materials you will start with. Realize that while you work you will probably need to find more stuff.



WHAT HAPPENS NEXT WEEK?

Next week is about putting together all the parts. Before you start, we will have a discussion page next Monday. I would like you to share ideas and feedback with your peers. You can certainly ask for feedback from family members too. Doing this, will help to design an advanced game.

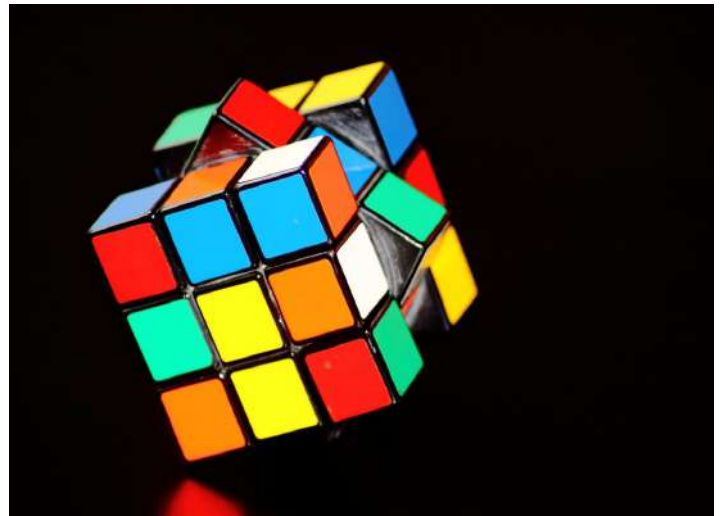
You have played and planned now it's time to

Design & Build

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Week Three of Four

1. Game Goal
2. Rules and # of Players
3. Player Interaction
4. Challenge for the Players
5. How will a Player Win?



6. Game Appearance Aesthetics

Your game also needs to LOOK good.

- Think about the Elements of Art & Design: Line, Color, Shape, Form, Texture, Value & Space.
- Also think about the Principles of Art & Design: Balance, Unity, Variety, Emphasis, Movement, Pattern & Proportion.

What Elements and Principles will you use?

GAME ON!

What do I turn in this Week?

Your Learning Target this week is to Design and Build your Game.

To achieve your Learning Target, you must write responses to items 1-6 and submit through Canvas. Include a photo of your game.



1. Game Goal

What is the objective of your game?

2. Rules and # of Players

What are your rules and how many people can play your game?

3. Player Interaction

How do people interact with each other?

4. Challenge for the Players

How will your players be challenged within your game?

5. How will a Player Win?

How do the players know when someone wins?

6. Game Appearance Aesthetics

What game pieces will you need to create?

Use the Elements and Principles of art as you build your game.

SCRIBESTRATE

DESCRIBE & ILLUSTRATE

DRAWING GAME

Scribestrate is a drawing challenge. You must duplicate someone's drawing without looking at it.

Materials:

- Paper
- Clipboard
- Pencil

Rules: You must describe with geometric shapes, letters, numbers or direction of line. You may not use objects/features such as eyes or nose in your description.

Step 1: Sit back to back so Players cannot see each others drawings.

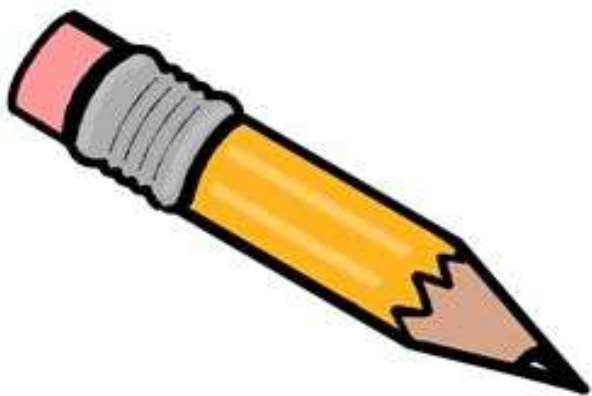
Step 2: Each Player will need paper, clipboard & a pencil. Both Players draw a contour drawing of an object. Don't show to other Players



Step 3: Player 1 has to describe his/her drawing to Player 2. Player 1 must give good instructions. Player 2 illustrates Player 1's description.

Step 4: Player 2 has to describe his/her drawing to Player 1. Player 2 must give good instructions. Player 1 illustrates Player's 2 description.

Winner is determined with the Player who is able to best duplicate the other Player's drawing.



SHARE, REFLECT, REDESIGN

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YOUR LEARNING TARGET THIS WEEK:
SHARE YOUR GAME AND RELFECT ON IT’S SUCCESS THEN REDESIGN IF NECESSARY.



Games of skill and strategy.

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DESCRIBE & ILLUSTRATE
DRAWING GAME

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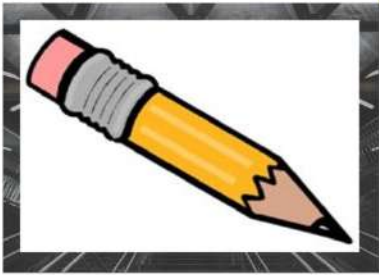
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Mrs. Bareis’s example of her game design, Scribstrate, a drawing game.

1.Share Your Game

Share with family in person or send your game to friends. For example, I wrote my game up on a document that I can share with my art friends.

- Explain your game to others.
- Play your game.
- Record the players responses to your game.



Games have cultural backgrounds.

2.Reflect using our Checklist

You should be able to check off all items to have a proficient to advanced game design.

- ❑ Appearance of my game is motivating. The name of my game is intriguing.
 - ❑ Goal or Objective of my game is engaging.
 - ❑ Rules and Instructions are clearly understood by players. Number of players for the game is appropriate.
- ❑ Interaction of players within the game is fun.
 - ❑ Competitive or Challenge makes the game engaging.
 - ❑ Players are motivated to play again.

3. REDESIGN

Make any changes to improve your game. And play again.

What to turn in?

1. What responses did people have from playing your game?
2. After playing your game with others, reflect on changes or additions you would like to make.
3. Take a photo of your game or video (with permission) people playing your game.