Lesson 8 - Develop Mechanics

In this lesson, students will explore the concepts of idea spiraling and backtracking in game design. They will learn how to use their prior knowledge and ideas to create new mechanics and goals in game design. Through direct instruction and guided practice, students will understand the importance of building upon existing ideas to create engaging game experiences. They will work individually and in small groups to apply idea spiraling and backtracking techniques, ultimately creating their own game mechanics. The lesson will culminate with an exit ticket to assess students' understanding of the concepts covered.

Objectives:

- Students will understand the concept of idea spiraling and backtracking in game design.

- Students will be able to apply idea spiraling and backtracking techniques to create new goals and mechanics in game design.

- Students will demonstrate their understanding by creating their own game mechanics using idea spiraling and backtracking.

Materials:

- Whiteboard or blackboard

- Markers or chalk

- Game design worksheets

- Pencils or pens

Bell-Ringer Activity:

1. Display the following quote on the board: "In game design, creativity is key. How can we use our prior knowledge and ideas to create new mechanics?"

2. Ask students to take a few minutes to reflect on the quote and write down their thoughts on how prior knowledge and ideas can be used to create new game mechanics.

3. After a few minutes, invite a few students to share their thoughts with the class.

Introduction:

1. Begin by explaining to students that in game design, new mechanics can be created by drawing on the thematic and prior knowledge of the setting.

2. Define the terms "idea spiraling" and "backtracking" in the context of game design:

- Idea spiraling: A technique to create new goals and mechanics from previously created goals and mechanics.

- Backtracking: A method to create new ideas based off of the same goal or idea.

3. Explain that idea spiraling and backtracking are valuable tools for game designers to generate new and innovative ideas.

Direct Instruction:

1. Discuss idea spiraling in more detail:

- Explain that idea spiraling involves taking an existing goal or mechanic and expanding upon it to create new goals and mechanics.

- Provide examples of how idea spiraling can be used in game design, such as adding new challenges or obstacles to an existing mechanic, or creating new variations of a goal.

- Emphasize the importance of building upon existing ideas to create a cohesive and engaging game experience.

2. Discuss backtracking in more detail:

- Explain that backtracking involves revisiting a previous goal or idea and exploring different possibilities or variations.

- Provide examples of how backtracking can be used in game design, such as revisiting a previous level or puzzle and adding new elements or twists to it.

- Highlight the benefits of backtracking, such as finding new ways to challenge players or adding depth to the game mechanics.

Guided Practice:

1. Divide the class into small groups.

2. Provide each group with a game design worksheet.

3. Instruct the groups to choose an existing game mechanic or goal and apply idea spiraling and backtracking techniques to create new goals and mechanics.

4. Circulate among the groups to provide guidance and support as needed.

5. Encourage the groups to share their ideas and discuss the process of idea spiraling and backtracking with the class.

Independent Practice:

1. Ask each student to individually create their own game mechanic using idea spiraling and backtracking techniques.

2. Provide the students with the necessary materials (worksheets, pencils, etc.).

3. Allow students sufficient time to brainstorm, sketch, and refine their ideas.

4. Encourage students to think creatively and explore different possibilities.

Exit Ticket:

1. Distribute exit tickets to each student.

2. Ask students to briefly explain the concept of idea spiraling and backtracking in game design.

3. Collect the exit tickets to assess students' understanding of the lesson objectives.

Closure:

1. Review the key concepts covered in the lesson: idea spiraling and backtracking in game design.

2. Emphasize the importance of creativity and building upon existing ideas in game design.

3. Encourage students to continue exploring and experimenting with idea spiraling and backtracking techniques in their future game design projects.

4. Thank the students for their participation and effort in the lesson.