makeblock

Basics of Game Design Thinking

Teacher: Claire Lin	Grades: 3-5	**Time Required**:45 min
Subject: Game Design	**Teaching Objective:** 1）Students will have a clear picture of game design procedures.	
Materials		**New Concept**
Teachers： Teacher's Guide & Slides	**Students:** Pencils and Papers	Game Design (design procedures）

The Teaching Sequence

Introduction: Giving an overview of the lesson – **Game Design Procedures**

（objectives） Explain to students what procedures we should follow when designing a game. Help them get a better understanding of it.

Game Design Procedures: Brainstorming - Prototyping - Playtesting - Iterate & Implement

Tell students that "The goal of this lesson is to learn about Game Design. Then how to design a game exactly? According to the explanation from *Game Design Workshop* and *The Art of Game Design*, the principles of game design has four fundamental steps: Brainstorming, Creating a Prototype, Playtesting, and Iterate& Implement. By following the four steps, we can turn our fanciful ideas into real games."

Explanation about principles of game design:

1）Brainstorming: "First, teachers put forward with problems. Second, encourage students to come up with solutions or more ideas. And, teachers should remind students that they need to think carefully and decide which solution or idea is the best one. Finally, help students find a way to record the best solution or idea for later use.

2）Prototyping: Turn your ideas into a real game. At first, tell students to use pencils or other tools to create a physical prototype that is easy to play. When creating a digital prototype, students can work with mBlock 5 to quickly turn our game ideas into reality and test the prototype.

3）Playtesting: Expose prototypes to target players for testing and get feedback from them.

4）Iterate and complement: Iterate the game based on the testing results and implement the game.

Guided Practice:

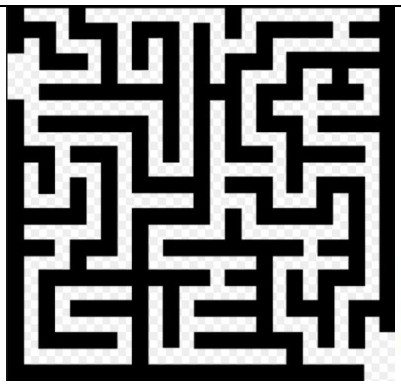
1）Brainstorming:（Teaching objective）Let students think about one thing: If they're going to design a paper maze game, what would the game be like?

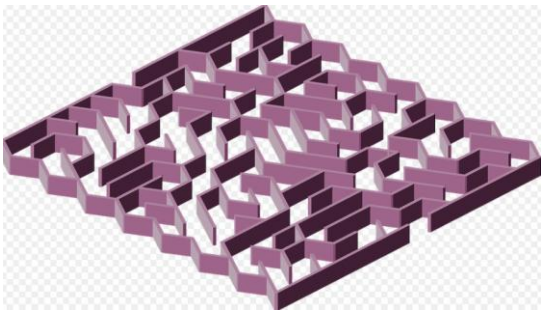
Navigate students to think about their previous experiences: "Kids, have you ever played maze games? What types of maze games then? Share with us, will you?"

Invite students to share their game experiences with the class. This is to spark their interest and inspire them to think.

Direct students to think about one question: "Now we are going to design a maze game. What would it be like?"

Leave time for students to think and discuss with classmates.

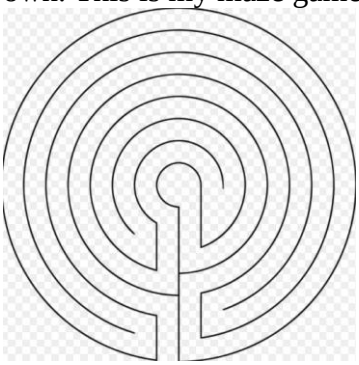




2）Prototyping: (Teaching objective) Students will learn to create a game prototype.

Teachers demonstrate how to create a prototype.

Teachers: “You’ve just come up with plenty of game ideas. I’ve also designed a maze game of my own. This is my maze game design. Try it!”



3）Playtesting:（Objective）Expose students to a pivotal step in game design - *Playtest*

“Kids, what do you think of this maze game? Any ideas to improve it?”

4）Fine-tuning & Completing:（Objective）Students will know how to fine-tune the prototype and complete the game design.

Fine-tune the maze game based on the test feedback.

Independent Practice:

It’s Your Turn!

1) Choose a solution

Help students conceive an idea of their own maze game.

Teachers: “You’ve just come up with so many ideas for your maze game. Now you have to choose a final design.”

2）Prototyping:

Students start to create a prototype for their maze game.

3）Playtesting:

After students finish their designs, have them work in pairs to test their maze games mutually and give their feedback.

4）Fine-tuning & Completing:

Fine-tune the game design based on the test feedback.

Share:

Presentation

Each student can invite others to try his or her game.

Vote for the best game of the day.

Tailor your teaching plan		
Enrich the tasks	**Simplify the tasks**	**Manage the class effectively to help students learn easily**

Comments:

Teachers' Reflections：