KEY IN-CLASS STUDENT ACTIVITY 2.2: CHOOSE AN OUTPUT DEVICE

Lesson Objective 2.2:

Choose an output device. *Topics*: screen, television, hand-held devices, sound (local speakers, surround sound systems).

Resources, software, and additional files needed for this lesson:

1. Internet connectivity
2. Student Wikispaces.com accounts
3. The Wikispaces in Education Tutorial may be a valuable pre-lesson assignment: *http://www.slideshare.net/cliotech/wikispaces-tutorial-306220*.

Guiding questions:

1. **What output devices are commonly used when playing games?** LCD monitor, TV, mobile device (Windows Phone®), speakers, and surround sound.
2. **What must a game designer consider when selecting an output device for a game to be developed?** Objective of the game, intended audience, what devices the game will be created for, and so on.
3. **How have recent technologies affected how game players receive output from games?** The Windows Phone can use an accelerometer for kinetic output.

Student activity:

Directions to the student:

Complete the following activity.

1. Review the Wikispaces in Education Tutorial: *http://www.slideshare.net/cliotech/wikispaces-tutorial-306220* if needed.
2. Log in to the Wikispaces.com site assigned by your teacher.
3. On the student page that has been created for you, rank in order two to three output devices that would be desirable for each game scenario.
4. Defend your rankings with specific details and reasons based upon sensory stimulation.
5. Add one new game scenario under the topic "Other Game Scenarios."
6. Respond to one other student's "Other Game Scenarios" posting by suggesting two to three output devices in the same way you did in steps 2 and 3.

Alternate activity:

Respond to the scenarios below on paper. To simulate the interactivity, exchange papers with classmates and respond to their ideas.

Three game scenarios:

Derek Brown, the CEO of Graphic Design Institute, has received a large contract from a prominent educational products company to design games that will provide an engaging way for students to learn

concepts in a variety of topics. He has come up with some possible games and is eager to match the intended learners' experience accurately with the best output device. Derek recognizes that factors such as the goal of the game, the game response anticipated by the player, and the age of the player are important considerations. Derek is also keenly aware of the need to engage players in deep sensory experiences.

Game 1: A math game teaches multiplication by allowing the user to shoot at the correct answers as the numbers fly by. When a level is completed, a car racing game will be accessible. In addition to visual feedback, what other senses can provide the next most effective feedback, and what output device is most appropriate?

Game 2: In a chemistry quiz game, the user jumps through a maze and grabs the correct formulas to match definitions. When a level is completed, the user will get a matching puzzle game to learn more about the formulas. In addition to vocal auditory feedback, what other sense can provide the next most effective feedback and what output device is most appropriate?

Game 3: In a geometry game, the user matches a word to a shape by flying a plane through geometrically shaped clouds (triangle, square, rhombus, pentagon, and so on). When a level is completed, the user gets to shoot through the clouds to gain more points. In addition to sound effect auditory feedback, what other sense can provide the next most effective feedback, and what output device is most appropriate?

Answers will vary. Students will correct inaccurate information submitted by classmates in the wiki environment. Monitor content and correct as necessary. The Wikispaces in Education Tutorial may be useful as a pre-lesson assignment: *http://www.slideshare.net/cliotech/wikispaces-tutorial-306220*.