Anoka-Hennepin Secondary Curriculum Unit Plan

Department:	BME	Course:	Video Game Design and Marketing	Unit 6 Title:	Input, Collision, Texture, Sound	Grade Level(s):	9-12
Assessed Trimester:	A	Pacing:	5-6 Days	Date Created:	4/23/2014	Last Revision Date:	

Course Understandings: *Students will understand that:*
- Writing programing code is essential in designing effective 3D programs.
- The organization of basic elements is important in creating a well-designed program.

DESIRED RESULTS (Stage 1) - WHAT WE WANT STUDENT TO KNOW AND BE ABLE TO DO?

Established Goals

- **Computation VI. Problem Solving Applications:** Use mathematical procedures to analyze and solve basic business problems.
- **Information Technology IV. Input Technologies:** Use various input technologies to enter and manipulate information appropriately.
- **Information Technology XI. Programming and Application Development:** Design, develop, test, and implement programs.

Transfer

Students will be able to independently use their learning to: (product, high order reasoning)
- Apply computational skills and advanced programing commands to produce an intermediate level 3D game with multimedia effects

Meaning

Unit Understanding(s):	Essential Question(s):
Students will understand that: • Game designers offering the player the chance to control the game is very important • Collision detection is detecting when collision spaces touch • Textures are images that are applied to objects to make the game more realistic • Sound and music are important aspects of a well received video game	**Students will keep considering:** • What type of input or control do players want? • What type of sound, music, and image files can I use? • How do I keep my player and camera in my game world?

Acquisition

Knowledge - Students will:	Skills - Students will:
• Know how to load images, sounds, and music into their game • Know and understand how to give the player input controls • Know and understand the 3D X, Y, Z axes to define collisions **Reasoning - Students will:** • Analyze code to determine outcomes	• Write code to put textures on objects • Write code to insert music and/or sounds • Develop collision on different objects

Common Misunderstandings	Essential new vocabulary
• Music and sound are the same type of files • It is easy to keep the player inside the world • Sound and music can be saved into the same folder	• Collision • Inputs • Textures • Type of image files (bitmap, jpeg, gif)

	• EXE • Types of Sound/Music files (mp3, wav, midi)