Handout 1: Unit 6 Overview

Throughout history, people have used art and media to inform, influence, and inspire. In 1814, Francisco Goya's painting The Third of May 1808 strengthened the resolve of many Spanish citizens to resist Napoleon's occupation of their country, which significantly weakened the conqueror over time. The AIDS Memorial Quilt, begun in the late 1980s, continues to serve as a remembrance of those who have died of AIDS and as a celebration of their lives. The 1987 series Eyes on the Prize documented the struggle for civil rights in America. These are just a few examples of art and media that have raised awareness of an issue and influenced people's opinions and behaviors.

During this unit, you'll explore the role that art and media—specifically, video games— can play in educating people about an issue and motivating them to work toward a better world. You'll work in a team to develop an idea for a game that addresses an issue that is important to you, develop concept art for the game, and pitch your idea to your classmates and others.

Your work in this unit will revolve around the following questions:

- How are arts, media, and entertainment used to advocate and persuade?
- How can I transform my vision for a better world into an interactive media experience?
- What are the essential elements of video game design?
- How can I design a video game concept that is engaging and informative and also inspires people to take action?

Unit Project

You will work in teams to choose an issue that is important to you and design a concept and artwork for a video game that will engage your peers. You might choose to focus on nutrition or another health issue, graffiti or litter in your community, the need for tolerance and respect in your school, or any other topic for which you would like to effect change.

You'll apply what you've learned in previous units about concept art, storytelling, and character development to brainstorm a concept for the game and create sketches for the game's setting and characters. You'll analyze existing video games to identify elements that attract and engage players. Your team will then refine your game concept and artwork so that the game is not only educational and/or persuasive but also enjoyable to play. Finally, you will pitch your game idea to an audience of classmates and, possibly, community members and arts, media, and entertainment (AME) professionals.

What You Will Do in This Unit

Examine how art and media can be used as catalysts for change. Analyze art and media to explore the ways that they can influence opinions and actions.

Sketch your own vision of how to improve your community. What would you change in your world? Find an issue that is important to you, and draw "before" and "after" sketches of the change you'd like to effect.

Develop your own video game concept. Work in teams to choose and research an issue on which to base your video game, and then brainstorm ideas for game play, settings, and characters.

Sketch game components. Create preliminary sketches of concept art, including a setting, a screenshot showing elements of game play, and the characters and objects that players will find in your world.

Play games and critique their appeal. Try out video games in a range of genres, including games that are pure entertainment and games that are potential instruments of change. Which are the most fun, and why? Is it possible to learn while being engaged?

Refine one of your sketches. Choose one of your preliminary sketches to serve as the basis for a more detailed sketch that incorporates feedback from your classmates and the ideas you've gathered from analyzing a variety of games.

Create a vivid and engaging game world. Using your detailed sketch as a point of departure, sculpt, paint, or draw final artwork for your game. Work with team members to create a unified style for your concept art, considering the elements of art and principles of design you've learned about throughout the course.

Present your work. As a team, pitch your game idea with finished artwork to an audience of classmates and, possibly, community members and industry professionals.

Keep a journal. Keep a journal with your assignments, sketches, notes on the development of your ideas, research, and reflections on your work.

Portfolio Requirements

You will create the following items to keep in your working portfolio:

- Concept art sketches, including an overall representation of your game world, a screenshot, and one sketch of characters or objects from your game
- One detailed sketch based on one of your preliminary sketches
- One piece of completed artwork—a drawing, painting, or sculpture

You will also use your working portfolio to keep all your other coursework—sketches, journals, class work, assignments, and writing.

Vocabulary Used in This Unit

- *Avatar:* An electronic image that represents and is manipulated by the player of a video game in a virtual environment.
- Bias: A preference or an inclination that generally inhibits one's ability to judge impartially.
- **Concept document:** A written piece summarizing the concept of a video game and outlining essential elements of the game, such as the game idea, intended audience, storyline, and unique selling points.
- *Elements of art:* The components used to create works of art, including line, color, shape, form, texture, value, and space.
- *Game genres:* Categories of video games that share certain features, such as type of game play and setting. Examples of game genres include action games and role-playing games.
- *Graphics:* Visual representations that include images in addition to or instead of text. Computer-aided design, typesetting, and video games all use graphics.
- *Onscreen user interface:* A visual display of information within the game that gives players the information they need to play the game and make decisions, such as the number of lives they have remaining, their location within the game world, or links to other menus. The user interface is also sometimes called a *heads-up display*.
- *Platform:* The device on which a game is played. Examples of gaming platforms include gaming systems, personal computers, and handheld portable devices.
- *Principles of design:* The organization of works of art involving the ways that the elements of art are arranged (for example, balance, contrast, dominance, emphasis, movement, repetition, rhythm, subordination, unity, variety).
- *Unity:* The total visual effect of a composition achieved by the careful blending of the elements of art and the principles of design.
- *Victory condition:* The situation in which a video game player is said to win the game. This can take many forms, including winning a race, gaining territory, building a structure, eliminating obstacles or other competitors, or successfully completing a puzzle. In cooperative games, all players work together to achieve the victory condition.
- *Video game:* An interactive form of play that uses a digital video screen to manipulate images and usually involves elements of conflict, involvement with other players, a goal or way to win, and a mix of randomness (luck or fate) and decision-making.

Handout 2: Game-Play Log

Game	Date	Summary	Features	Features	Other
ītle	Played	of Game Play	You Like	You Dislike	Thoughts



Handout 3: Your Journal Assignments

Complete the following journal assignments when you are instructed to do so by your teacher.

Journal 1

Look at the artwork and jot down your responses to the following questions:

- What words describe the kind of world that is represented?
- How is that world different from the one we live in?

Now think about something that you would like to change in your community or in the world. Name the issue and think about the problems that it causes. Envision what a world without those problems would look like.

Sketch quick and simple "before" and "after" drawings that show a representation of the problems caused by the issue and a representation of the problems as solved. Your sketches can be realistic scenes, collections of symbols or diagrams, or abstract drawings.

Journal 2

Brainstorm a list of ideas for the purpose of your video game—the information you want players to learn about the issue or an action you want players to take in the real world. Use the following questions to help you formulate your game's purpose:

- Based on what you know about your issue so far, what do you want others to learn about it?
- What ideas, information, or attitudes about the issue do you want players to become aware of?
- How do you hope players will act on what they have learned?

Journal 3

Choose an element of the game that your team has not yet settled on. For example, do team members disagree about the game's setting? Does the team still need to decide what the key characters look like?

Write a few sentences outlining your point of view or listing your ideas. Plan to share what you've written with your teammates.

Journal 4

Respond to the following questions:

- What did you like about the video game you analyzed, and why? What didn't you like, and why?
- What aspects of the game might you use in your team's game? For example, did the graphics convey an emotion that you'd like to express in your game? Was there something about the rules of play that you might adapt for your game?

Choose an image or idea from the video game you analyzed to include on your team's inspiration board.

React, Practice, Imagine: Weekly Journal Activities

In addition to the journal assignments described above, choose one of the following three activities each week to do in your journal:

- **React**—Respond to a piece of art or media shown in class by writing about it. Then write two questions you'd like to ask the artist about the work. Try to answer the question as you think the artist might.
- *Practice*—Sketch something from observation or from your imagination.
- Imagine—Describe an art or design project that you are interested in creating.

Handout 4: Unit 6 Project Description

During this unit, you'll design a concept for a video game that engages people with an issue that you are passionate about. You'll work in a team to choose an issue and then design a concept for a video game that informs players about that issue and encourages them to become involved.

Your game concept will include the purpose of the game, how it's played, its setting, and a description of characters and objects that appear in your game's "world." You'll also create sketches and finished art depicting the game world. At the end of the unit, you'll pitch your game concept to an audience of classmates and others.

Step 1: Choose an Issue

With your team, start exploring some problems and issues that you care deeply about. These might be broad issues, such as poverty, discrimination, or global climate change, or they might be issues in your community, such as graffiti and trash in a local park, the lack of after-school programs, the nutritional value of school lunches, or the need for recycling. Make a list of all the issues you care about, then begin to narrow it down. For broad issues in particular, be sure that at least one team member knows something about the issue.

Work with your team to choose one issue on which to focus your video game concept.

Step 2: Research the Issue and Create an Inspiration Board

Work with your team to conduct research on how your issue affects people in your community and elsewhere and how people—particularly young people—can take action on the issue.

Compile your team's findings onto an inspiration board—a collection of ideas, images, and information that will help inform your decisions about how to design your game.

Step 3: Choose a Purpose

As a team, decide on the purpose of your game. Do you want to provide information, raise awareness about an issue, encourage people to take action, or all three?

Decide on your game's purpose and create a list of strategies for how to achieve it.

Step 4: Begin to Develop Game Ideas

It's time to start thinking about what your game will look like and how players will play it.

Brainstorm ideas with your team and complete a journal entry about one area you would like to develop further.



Step 5: Create the Game World

Work with your team to define your video game's world. Will your game take place in the forest, the city, or an imaginary world? What do the characters in the game look like—or are there any characters at all? What style will you use to draw the game—realistic, simplified, cartoon-like, or something else? What colors will you use—bright or drab? How do you want players to feel as they play the game, and how can you create visuals that prompt them to feel this way?

Step 6: Sketch the Concept Art

Once your team agrees on what the game world will look like, the objects or characters it includes, and the mood you want to convey, each team member will create three preliminary sketches of concept art:

- An overall depiction of the game world
- A screenshot of a moment in time
- A sketch of characters and/or objects that appear in the game world

As you work, you'll try to make your sketches exhibit unity with one another and with the sketches by your other team members.

Step 7: Create a Detailed Sketch

After receiving feedback on your preliminary sketches and refining your game concept based on your analysis of other video games, you'll work with your teammates to choose one of your original sketches to develop in more detail.

Each team will produce four detailed sketches:

- One overall depiction of the game world
- One screenshot of a moment in time
- Two sketches of characters and/or objects from the game world

Step 8: Create Finished Concept Art

After incorporating class feedback, you'll create a painting, drawing, or sculpture (such as a maquette) of a character or object from your game.

As you work, you'll focus on the ways that your art does the following:

- Uses art elements and principles of design to engage an audience
- Addresses and reinforces the game's issue and purpose
- Achieves unity with the other artwork created by your team

Step 9: Pitch Your Game Concept

At the end of the unit, you'll pitch your game concept and artwork to an audience of your classmates and others. Your pitch will include the following:

- The game's issue and purpose
- The game's concept and features, along with an explanation of how these support your issue and purpose
- Each team member's completed artwork, along with an explanation of how the game's graphics address its concept and purpose
- A convincing case for why people will be interested in playing the game

Step 10: Final Reflection on Your Work

You'll reflect on your work in this unit, answering the following questions:

- What was your favorite part of the video game design process? What did you especially enjoy about it?
- What was the most challenging part of the video game design process? What did you find especially challenging about it?
- What did you learn about your team's chosen issue during this unit?
- What did you learn about using art elements and design principles to create a unified look among different artworks?
- What did you learn about the role that art and media can play in persuading people or teaching them about an issue?
- What did you learn about the role that art and graphics play in creating a successful video game?
- What would you do differently if you were to do this project again?

Assessment Checklist 1: Unit 6 Project

Use this assessment checklist to plan and assess your project. Your teacher will use this checklist to help evaluate your work.

Requirements	Percentage of Total Grade		Comments	
Preliminart Sketches		Student Comments		Teacher Comments
Include:				
• A compelling sketch of a representative view or overall depiction of the game world	10%			
 A sketch of a screenshot that depicts an engaging game world and a clear, easy-to-understand onscreen user interface 	10%			
 A sketch of characters and/or objects that clearly belong in the game world as depicted in the other sketches 	10%			
Exhibit unity with one another and with other artwork created by the team for the same game	20%			
Clearly and powerfully address the game's issue and intended purpose	20%			
Make effective use of the elements of art and principles of design that the student has learned throughout the course				
Total	100%			

Requirements

Percentage of Total Grade

Comments

Detailed Sketch		Student Comments	Teacher Comments
Creates a detailed view	25%		
of the game world or a			
component of that world			
Exhibits unity with the other	25%		
artwork created by the team			
for the same game			
Clearly and powerfully	25%		
addresses the game's issue			
and intended purpose			
Makes effective use of the	25%		
elements of art and principles			
of design that the student			
has learned throughout the			
course			
Total	100%		

Completed Artwork		Student Comments	Teacher Comments
Contributes to the depiction of a vivid and engaging game world setting	20%		
Depicts a vision for the game that is unified with the team's other artwork	20%		
Clearly supports and addresses the game's issue and intended purpose	20%		
Makes effective use of the elements of art and principles of design that the student has learned throughout the course	20%		
Demonstrates the student's competence in painting, drawing, or sculptural techniques learned throughout the course	20%		
Total	100%		

Requirements

Percentage of Total Grade

Comments

Pitch (Team Assessment)		Student Comments	Teacher Comments
Clearly describes the game's issue and purpose and why the issue is important	15%		
Clearly and concisely describes the game's concept and elements	20%		
Uses completed artwork to help the audience understand the visual elements of the game	30%		
Convincingly explains how the game's concept and artwork work together to achieve the game's intended purpose	20%		
Makes a strong case for why the game's concept and features will engage players	15%		
Total	100%		

Handout 5: Sample Concept Document

Title of Game: Community Garden

Developers: Natalie, Joseph, Devin, Keisha

Concept (Summary): Choose a plot location, plant your seeds, tend them, and watch them grow! Who will grow the most produce in a single season?

Issue and Purpose: The game addresses the issue of food independence and the importance of a local, sustainable food supply. Problems related to food supplies today include shortages of fresh foods, high prices, chemical contamination, and the large carbon footprint and unfair work practices associated with many farming methods. To address these issues, players learn about growing food, including the needs of different food crops, the cost of maintaining a garden, and the savings on grocery store bills.

After playing the game, players might want to start a community garden of their own or to grow some of their own vegetables in a window box or small lawn plot.

Features:

- Players can choose from 15 different food crops and access information on each.
- Players move from level to level. As they save money on grocery bills or sell their surplus, they are able to grow more crops and more diverse produce.
- Players choose from urban and suburban community garden settings. They can also choose by geographical region. Each location has its own challenges.
- Players are rewarded for choosing native crops, planting a variety of produce, and using organic farming methods.

Genre: The game is primarily a real-world simulation, but it has some aspects of strategy games as players make choices to optimize their gardens. The game also has role-playing aspects, as players take on the role of a gardener in a particular place.

Game-Play and Motivation: Players are motivated to grow an abundance and diversity of produce within a limited budget and time frame. The game progresses through the growing season, with variations in planting dates depending on the region chosen. Players may obtain more seeds when they reach certain levels. Players can play against their previous scores and also work with other players to maximize plantings.

Setting: The setting changes depending on the region and location chosen, but the overall look is lush and colorful when crops are growing well, and more barren when gardens are not thriving. The look is realistic but also a little cartoon-like and exaggerated, so that when the plants grow well, the garden is almost surreal.



Characters: The players are the main characters, and they can choose their own characteristics.

Target Audience: (1) Anyone interested in learning about the benefits and challenges of growing a community garden to produce food. (2) Anyone who is interested in growing things but doesn't know how to do it.

Handout 6: Choose an Issue

Your team is ready to choose an issue for your video game!

1. Finalize the master list of issues.

Review the master list of issues you started after completing your "before" and "after" journal sketches. Brainstorm additional issues and add them to the list. Be sure that you only add issues that you care deeply about.

2. Analyze the issues on your list.

Consider the questions below for each issue on your list:

- How does this issue affect your life?
- How does this issue affect the lives of other people in your community?
- How much can ordinary people do to address this issue?
- How strongly do team members feel about working on this issue?
- How much information do you already have about this issue? How easy will it be to find additional information? (Is the issue so narrow that it will be difficult to find information? Is it so broad that it will be hard to limit the information to include?)
- How well will this issue translate to a video game? Will people want to play a game that focuses on this issue? Will the issue appeal to a wide audience?
- Many video games have a storyline and characters. Does this issue lend itself to telling a story?
- Video games often have both a goal and obstacles that make it difficult for a player to reach the goal. Are there challenges and obstacles related to this issue that will translate to a video game?

3. Choose your issue.

As a team, choose the issue that offers the most interesting possibilities for developing into a game and that one or more team members already know something about.

Consider the connections between the issue and your community and the larger world. Narrow a broad issue to give it a focus. For example, you might narrow the issue of discrimination by thinking about people in your community who have experienced it directly.

Broaden a narrow issue by relating it to a larger world issue. For example, you might broaden the issue of recycling at your school by considering what happens to the unnecessary trash generated because of the lack of recycling programs and how that impacts your region, your country, or the world.

Handout 7: Research Your Issue

Now that you have chosen your issue, you need to find out more about it. How will you research your issue and collect and organize the information you find?

1. Focus your research.

Begin by asking the following questions and writing your answers on chart paper:

- What do I already know?
- What do I want to know?
- Where can I find out more?

Your answers will help you focus your research.

2. Choose how you will research your issue.

Here are some possibilities:

- **Conduct Internet and library research.** Ask yourself, What do I want to know about this issue? and develop a list of questions based on your answer. Focus on answering these questions in your research.
- Interview people. Talk to people informally, or check out your school Web site or the Internet to find individuals or groups in your school or community who are affected by the issue. Identify stakeholders (groups of people affected by the issue), and interview people with differing perspectives. For example, if your issue is graffiti, you might interview a graffiti artist, a person whose job it is to prevent or clean up graffiti, and people who encounter graffiti. Keep in mind that each person you interview has his or her own biases, so don't rely too much on any one perspective.
- Visit sites in your community. Find sites in your community where people are affected by or are working to address your issue. For example, if the issue is hunger, you may want to visit a local food pantry or community supper and take photographs. Always make sure that you get permission to take photographs, especially if you are photographing people.

3. Collect your information.

Document your research by taking notes in your journal, recording interviews, printing images or quotations, and taking photographs. With your team, compile all your findings onto a team inspiration board—a collection of ideas, images, and information that will help inform your decisions about how to design your video game.

Here are some suggestions for your inspiration board:

- Summarize your research from school and community newspapers and Web sites and post the highlights on your inspiration board.
- Collect and post images, clippings, or stories exemplifying "before" and "after" scenarios for your chosen issue.
- Print images or quotations about the effect of this issue on different people or about ways to address the issue.
- Take photographs or make sketches of the problems you see.
- Interview people affected by the issue and post interview excerpts.

Your research will help your team develop ideas for your game concept and graphics!

Handout 8: Formulate a Purpose

Bring the ideas you wrote in Journal 2 about your game's purpose to a meeting with your team. Work together to compile specific goals for your game.

1. Generate ideas for your game's purpose.

As a team, focus the purpose of your game by answering the following questions:

• What do you want people to learn about your issue? Is there specific knowledge that you want them to gain?

• Do you want to introduce people to historical or cultural information? If so, what? (For example, if your game is about discrimination, you might provide a timeline of the civil rights movement.)

• Do you want people to feel a certain way about your issue after playing your game? If so, how do you want them to feel?

• Do you want people to take certain actions as a result of playing your game? If so, what? (For example, do you want them to volunteer in their communities or send an e-mail to a congressperson?)



2. Decide on your game's purpose.

Discuss the ideas your team listed above and decide on the purpose of your game (i.e., educating, raising awareness, and/or offering opportunities to act). Summarize your purpose in one or two sentences below.

Purpose:

3. Think about strategies to achieve your purpose.

Discuss strategies your game could use to fulfill its chosen purpose. Answer the following question:

• What features might you build into your game to achieve your purpose?

Read the examples in the box for ideas.

Examples: Game Purposes and Strategies

Example 1

Game Title: Where There's Smoke, There's Fire

Purpose: This video game is designed to educate teens about the dangers of smoking and secondhand smoke.

Strategies: Our main strategy for giving information is to have windows pop up on the screen when players need to make decisions. The windows will display statistics about teen smoking rates and give correlations between smoking and different types of cancer, lung disease, and other health issues. Another strategy is that players will be provided with links to more information at the end of the game.

Example 2

Game Title: On the Streets

Purpose: The purpose of this video game is to raise awareness and understanding of the homeless people who live in our community and in other areas of the country and to spur people to take action to help.

Strategies: This role-playing game will present players with realistic situations in which they have stable lives and then unexpectedly face becoming homeless because of a job layoff, a serious illness, or an injury. Homeless players or players on the brink of homelessness must make decisions about seeking help. There will also be options in the game for players to strengthen support for homeless people in the game world, such as creating shelters or distributing food and blankets. These supports might directly help other players or themselves. At the game's conclusion, there will be a listing of organizations, such as food kitchens or homeless shelters, for which players can raise money, make donations, or perform volunteer work.



With your team, create a list of strategies on a separate sheet of paper, then narrow down your list to a few strategies. Write them below.

Strategies:

Handout 9: Game Ideas

With your team, answer the questions below. If team members have more than one response to a question, write them all down. You will have opportunities later to refine your answers and focus your game ideas.

- 1. What is the name of your game?
- 2. What issue does your game address? What is your game's purpose in addressing this issue?
- 3. What strategies will you use to achieve your game's purpose?
- 4. What is the object of your game? How does a player win or complete the game?
- 5. How is the game played?
- 6. What is the setting or look of the game?
- 7. What objects or physical locations might a player see, and what will they look like?
- 8. Who are the characters in the game? What are they like? Is the player a character?

Handout 10: Analyzing Game Worlds

Complete this table for one screenshot of a video game world.

What is the name of this video	
game?	
What adjectives come to your mind	
when you see this scene?	
How does this scene make you feel?	
What can you tell or infer about the	
setting or world of this particular	
game? How?	
What do you think the mood of this	
game is?	
What elements of art are used to	
convey this mood or feeling? (How	
does the artist or designer use line,	
shape, form, texture, value, and	
space?)	
Does the image show an onscreen	
user interface—an area that displays	
information about the game? If so, what does it look like and what	
information does it convey?	

Handout 11: Our Game World

Your team will need to consider two aspects of your game's graphics: the setting of the game world and the visual style in which that world is created. Graphics set the mood of your game and can convey important information about your chosen issue. The more compelling your graphics, the more likely your game is to catch and hold the players' attention. Graphics are also key in the marketing of your game.

To be successful, your team must decide together on the setting and style of your game. All the concept art created by your team members must exhibit *unity*—the careful blending of the elements of art and the principles of design to create a total visual effect. Think about how unity was achieved in the screenshots you analyzed. In a unified game design, all the pieces look like they belong together. A unified look will enhance the players' experience of immersion in the game world and help them suspend their disbelief, no matter how fantastical that world may be.

This handout will help your team answer two key questions:

- What is the setting and visual style of your game?
- How will your team achieve unity in its artwork and game design?

Setting

Your team will think about how the setting can enhance your game's ability to inform people about your issue, raise their awareness, or motivate them to act. Consider the following types of settings:

- **Real-world settings.** In some issue-based games, the setting is very realistic because the game is designed to inform viewers about an issue in the real world. For example, a game about smoking might be set in a high school, while a game about respect might be designed to look like a basketball court and bleachers.
- *Imaginary worlds.* A game may take place in an imaginary world similar to our own or in a completely strange world. The setting for a game that teaches about global warming, for example, might be an imaginary world where players' decisions can cause the world to flourish— or to fall apart.
- *Abstract settings.* Some games, especially puzzles and certain action games, may be abstract or look like board games. They may not include any characters or landscapes at all. For example, a game about obesity might have a large balance scale with places for players to put snack food choices.

Style

Once you've decided on your game setting, you can think about the style you'll use to create that setting. The style could be realistic or more like a cartoon, anime, or a watercolor painting. Think about the kinds of lines you might use (thick or thin), the colors you could use to convey a specific mood, and the shapes and forms of characters and objects in your game world. Consider how your style compares with other games you've seen.

Creating Your World

To achieve unity in your artwork, you will need to come to a consensus about the look and feel of your game. As a team, answer the following questions:

1. Where does the game take place—a real-world setting, an imaginary world, a more abstract world? What are the boundaries of this world?

2. If the game is set in a real or imaginary world, does the game play take place outdoors, indoors, or both?

Outdoors: Describe the landscape. Is the climate warm or cold? Are there many plants, or is it dry like a desert? Is it mountainous or flat? Does the game take place in a city or town? If so, what do the buildings look like?

Indoors: Describe the indoor space or room(s) where the game takes place. Is the area large and open or small and contained? Is it dark or bright? Dirty or clean?

3. If the game takes place in an abstract setting, describe what players will see. A geometric board, as in chess? A rectangular box with shapes in it, like *Tetris*? Is the setting based on changing patterns or colors?



4. Do people or humanoid characters inhabit the game world? If so, what are they like? How do they look? What do they wear? If the characters are not like people, what are they? How do they look and act? What objects appear in your game world, and what do they look like?

5. What kind of onscreen user interface will there be? Will certain information be available on the screen at all times? If so, what kinds of information will be given? If not, how will the player receive game information, and how will it appear?

6. What adjectives would you want people to use to describe your game's setting? What emotions do you want players to feel?

7. What style will you use to draw the game's setting—realistic, abstract, cartoon-like, or something else? Will it be simplified or highly detailed? Why have you chosen this style? What colors will you use? Why?

8. How will the game's setting and visual style reflect the issue you are addressing?



Handout 12: Feedback Form for Sketches

Preliminary Sketches

Record the class's feedback for each of your three sketches.

Sketch 1: Overall Depiction of the Game World

Emotions and feelings the art evokes:

How the art conveys information about the game world and your chosen issue:

Suggestions about game concept and unity:

Sketch 2: Screenshot of a Moment in Time

Emotions and feelings the art evokes:

How the art conveys information about the game world and your chosen issue:

Suggestions about game concept and unity:

Sketch 3: Characters or Objects from the Game World

Emotions and feelings the art evokes:

How the art conveys information about the game world and your chosen issue:

Suggestions about game concept and unity:

Detailed Sketch

Record the class's feedback on how your sketch addresses each category.

Uses art elements and principles of design to engage an audience:

Addresses and reinforces game's issue and purpose:

Achieves a unified look with other sketches from the same game:

Handout 13: Video Game Analysis

Work with your team to analyze two video games. Fill out the chart below for each game. Items marked with an asterisk (*) are only for the issue-based game.

Game Title: ___

Title	
Is the title engaging?	
How does it reflect what the game is about?	
Game Concept	
Summarize the main idea	
of the game in one or two	
sentences.	
*Issue and Purpose	
What real-world issue does the game address? What is the game's purpose?	
(For example, does the player	
learn anything? Can the player	
take action on the issue?)	
Features	
What features are unique to this game or might be good selling points? List two or	
three of the most important.	

Game Play	
What goal does the player try to achieve? Are there challenges?	
(For example, does the player build something, collect objects, race to the finish?)	
Is there a way to win the game, and if so, how?	
Game World (Setting)	
Where does the game take place? What is the mood, or how does it make you feel?	
Characters	
What is the player's role? What point of view does the player have in the game?	
Target Audience	
Who might play the game? Is it aimed at a particular gender, culture, or age group? Why do you think that?	

Game Critique			
Was the game enjoyable?			
Would you play it again? Why			
or why not?			
What did you like or dislike			
about the game's graphics or			
other visual elements? Explain.			
*Was the game effective in			
teaching or influencing you			
about an issue? Why or why			
not?			
How would you improve			
the game to make it more			
enjoyable or more effective			
in teaching and influencing			
people about an issue?			

Handout 14: Video Game Genres

There are many types, or genres, of video games. In competitive games, a player competes against other players or against the game in order to win—or to achieve what's called the *victory condition*. In cooperative games, all players work together to achieve the victory condition. And some games have no victory condition—rather than try to win, players set their own goals or use the features to explore the game world.

Most games can be categorized under one of the genres below, though some games might not fall under any of these genres and some might fall under more than one.

Puzzle Games

In puzzle games, the core mechanics center around the completion of a logical, spatial, language, or other type of puzzle. For example, in *Tetris*, the player ponders a simple spatial puzzle, arranging shapes composed of blocks to complete finished lines.

Examples: Puzzle Quest, Plants vs. Zombies

First-Person Shooter Games

Two key characteristics define these games. The first is that the camera is directly embedded at the eye level of the player's *avatar* (electronic image), giving the player a "first person" perspective. The second is that the player's primary interaction with the world is through the collection and application of weaponry (hence the word "shooter").

Examples: Borderlands, Jet Force Gemini, Wolfenstein 3D

Action Games

Action games put players into exciting, action-based roles, engaging them in combat, acrobatics, super powers, or other sets of reflex-based interaction in a fictional environment. These games often use an "over the shoulder" camera, or "third person" perspective, to allow players to see their avatars in the environment.

Examples: Dynasty Warriors: Strikeforce, Devil May Cry

Role-Playing Games

The strict definition of a role-playing game is one in which the player takes on a rich identity in a game world and explores the world through that perspective. The genre, however, also includes games that use number-based statistical systems (for example, strength, hit points, and weapon damage) to evaluate the player's capabilities. Players cycle through adventures to increase their "stats" and tackle stronger opponents.

Examples: Dragon Age, Ultima IV

Massive Games

Massive games are played exclusively online, where players log in to a large, shared, and persistent world. This world exists for other players even when you aren't playing, and special events and interactions occur whether you are logged in to the experience or not. Massive games are often developed as role-playing games called *massively multiplayer online role-playing games*.

Examples: World of Warcraft, Runescape, EVE Online

Real-Time Strategy Games

Real-time strategy (RTS) games usually involve the control of a group of military units, where battlefield commands and maneuvers define the strategy. These games also often involve managing and producing resources; players fight over and control these resources, which can then be turned into more units or upgrades to existing units. The "real time" component of RTS refers to the fact that the game does not pause to allow you to consider your next move, and players must make tough decisions about which components of their teams to attend to at any given time.

Examples: Dawn of War II, Sins of a Solar Empire

Turn-Based Strategy Games

Turn-based strategy games are similar to RTS games, but allow players to consider all of their options. These games are often more detailed in their mechanics and lean toward historical accuracy or simulation-like modeling of the game's world.

Examples: Civilization IV, M.U.L.E.

Racing Games

Players control a vehicle and compete in a race. These games range from simulation racing to more outrageous "kart" style racing, but all involve the player using his or her reflexes and vehicle's capabilities to get ahead of the pack.

Examples: Wipeout HD, Gran Turismo

Sports Games

These games re-create a particular sport. They generally reference a set of rules from a real-world game to build their structure. Interestingly, in many sports games, the player controls a team from the viewpoint of someone watching sports on TV, rather than from a first-person perspective or other viewpoint.

Examples: Blood Bowl, Madden NFL 10



Platformer Games

Platformer games involve exploration puzzles that require the player to use well-timed jumps or other acrobatic abilities to navigate a challenging environment. These games have their roots in 2-D (side-scrolling) classics, but have moved on to include games developed in 3-D space as well.

Examples: Tomb Raider, Braid

Adventure Games

Adventure games are an old and venerable genre, with their roots in the earliest text adventure games, before graphics were feasible for gaming. Adventure games are generally narrative-driven, placing the player in a story. While exploring the game's world, the player acquires inventory objects, which can be combined and used with objects in the game's environment in order to solve puzzles. Solving these puzzles allows the player to continue exploring and move the narrative forward.

Examples: The Neverhood, Tales of Monkey Island

Fighting Games

Fighting games pit characters against one another in martial combat. They are often two-player games or one-player games with computer artificial intelligence substituting for the second player. The player uses a specific fighter's array of special moves and combinations to defeat opponents. To win, players need a deep understanding of the other character's capabilities, strong pattern recognition skills, and lightning reflexes.

Examples: Soul Calibur IV, Samurai Shodown

Rhythm Games

Players take on the role of musicians and perform beat-matching interactions that parallel a component of music in order to win. These games often feature peripheral controller devices that emulate real-world instruments.

Example: Guitar Hero, Dance Dance Revolution

Handout 15: Select Team Art

As the next step in developing your finished concept art, you will create a detailed sketch based on one of your preliminary sketches. The final concept art for your team must include the following:

- One sketch of an overall depiction of the game world
- One sketch of a screenshot of a moment in time
- Two sketches depicting characters and/or objects that appear in the game world

With your teammates, select two sketches from different teammates for the first two categories (game world and screenshot) and four sketches for the final category (characters and objects). Be sure to include at least one sketch from each team member. Refer to your copies of **Handout 12: Feedback Form for Sketches** to review the class's comments on the selected sketches.

Answer the questions below to help you select your team's final four sketches:

- Which sketches work well together with the overall game concept?
- In which sketches do the art and design elements best incorporate your team's revised game concept and graphics ideas?
- On which sketches did team members receive the most useful feedback?
- Which sketches offer the most potential as finished concept art?
- Which sketch is each team member most interested in developing into finished artwork?

Handout 16: Unit 6 Career Information

Range of Careers Related to Unit 6

Below are some of the AME careers that make use of the skills you're learning in Unit 6:

- Game tester
- Game designer
- Lead designer
- Game artist
- Technical art director
- Concept artist

Key Careers

Four key AME careers that make use of the skills that you are learning in Unit 6 are *game tester*, *game designer*, *lead designer*, and *game artist*.

Game Tester

Game testers play games in order to test the software, find *bugs* (problems with a game's functions), spot mistakes, and write reports to ensure that games work properly before they are released.

Playing games every day may seem like fun, but game testers must be passionate about game development and willing to do tedious, time-consuming tasks. They often need to play the same level of a game for hours at a time, repeating plays with every possible variation. They need to be detail-oriented in order to find potential problems. (Releasing games with errors in them disappoints fans and hurts the reputations of game creators.) Because they need to record detailed instructions about problems, game testers must also have excellent written and oral communication skills.

Game testers may do compatibility testing to make sure that games play smoothly on different computers and operating systems. Game testers also test variables, such as how many players a game can handle and how long it can be played without crashing.

Pathway: Game testers are not required to have degrees, although many testers have a degree in their area of interest (such as art or computer science). Portfolio samples are not usually required, nor is experience (other than game-playing experience). However, game testers should have an up-to-date understanding of popular games. Like most people in the game industry, testers must be willing to work long hours, especially during the last stages of game development.

Game testers usually freelance at first and later may find full-time employment with the companies that hired them as freelancers. Many people in the game industry recommend breaking into the industry this way, because a tester gets to see the inner workings of game development and to develop relationships with people in game companies.

- Character artist
- Environment and prop artist
- Special effects artist
- Level designer
- Animator

Game Designers and Lead Designers

Game designers come up with concepts and ideas for games. They are involved in a game's development at every stage, from preproduction through production and launch.

A game designer might come up with the main idea for a game or might design a game that another person has conceptualized. For example, a game designer might develop ideas for a game based on a comic book or movie or might think up new game-play ideas based on a concept from another member of the design team.

Game designers need a broad set of skills and knowledge. They must understand game trends, game platforms (for example, gaming systems, personal computers, and handheld portable devices), how games are played, who plays them, and stages of game development. They need to have skills in software and technology, art and design, and writing and storytelling. Many game designers specialize in a particular area.

Companies with teams of game designers often create positions for lead designers, who must also have the skills and knowledge described above. Lead designers work in large development teams. They are responsible for overseeing and mentoring other game designers and for presenting the design team's ideas to others within the company. They have responsibility for and creative control over their games.

Both game designers and lead designers may have the following range of duties:

- During preproduction:
 - Coming up with game concepts and innovative ideas for game play
 - Conducting research related to game concepts
 - Guiding the creative direction of a game
 - Collaborating with the development team to create game design documents that explain a game's technical specifications, art, and style, and describe how the game will be played
 - Overseeing the creation of game prototypes
 - Presenting ideas to team members, directors, and producers
- During production:
 - Updating design documents as games are developed
 - Working with the art team to develop design reference guides (such as character models and concept art)
 - Communicating with all members of the development team: providing feedback, overseeing development, and making sure that team members understand the components of game design relevant to their own work
 - Collaborating with quality assurance supervisors and game testers to fix bugs
 - Tracking schedules to ensure that development tasks are completed on time

Pathway for game designers: Game designers often break in through game testing (see Game Tester, above) or through art and design internships, and then move into game production and design after they have been hired by a game company. Game designers are usually employed full-time, but sometimes they are hired on a short-term basis for specific projects.

Game designers usually have a bachelor's degree in game design, art, or computer science. They also need three to five years of experience in a specialty area, such as character design or *level design* (the design of different challenges, or levels, of a game). A portfolio that shows a wide range of design and game experience is also important. Game designers need to work well as part of a team and have good oral and written communication skills. As their experience in game design increases, game designers may become lead designers.

Pathway for lead designers: Lead designers need the same education and experience as game designers and usually have two or more years of experience as game designers. Since they oversee a team of game designers, they need leadership skills. In addition, lead designers make presentations, so they must be effective and persuasive communicators. Lead designers may become chief creative officers or executive producers.

Game Artist

Game artists create thematic artwork and special effects for video and computer games. They often specialize in 2-D or 3-D games. They may further specialize in such areas as textures, characters, or background environments. Game artists use traditional art methods and digital art software and need excellent observational drawing skills. Game artists create both organic and geometric artwork and visually communicate emotion and mood, often working within set style guidelines.

Game artists need mathematics and science skills. Geometry and trigonometry are useful for planning distances between points and simulating movement. Calculating trajectories for flying objects, rotating vehicles, and determining whether a collision will take place all require math and physics skills.

Pathway: Game artists have an arts background and have done internships and/or freelance work. They may become senior artists, lead artists, or art directors. The specialties of game artists—as well as their level of seniority and their titles—often vary from company to company.

Appendix A: Interviewing Techniques

Interviewing is a great way to meet people and to learn information you couldn't learn in another way. You may conduct your interviews in person, over the telephone, or using e-mail. Whichever method you choose, it's important to prepare in advance. Know what you plan to do during the interview and be prepared for any follow-up.

The following techniques, for use before, during, and after the interview, will help you get the most out of the experience.

Preparing for the Interview

- **Contact the interviewee.** Get in touch with the person you'd like to interview. Describe the purpose and length of your interview. Arrange a time to meet in person or to talk on the phone. If you plan to record your interview, ask for permission to do so in advance. If you plan to conduct the interview by e-mail, let the person know your timeframe for sending questions and receiving a response.
- **Conduct research.** Do your homework! Look for information about the interviewee's organization or how he or she is involved with the issue. Background information helps you focus and ask questions you might not have thought of.
- Think about topics. Decide what information you want to get out of the interview. Remember, an interview is a chance to get information that you may not be able to find anywhere else. Make a list of the important points.
- List your questions. Write a list of questions to ask and ask your teacher or someone else to review them. Ask open-ended questions, rather than ones that can be answered with yes or no. For example, instead of "Do you like your work?" ask, "What parts of your work do you like most?"
- Order your questions. Ask your questions in a logical sequence, from basic questions (for example, "Can you tell me about your experiences working with homelessness?") to more specific questions (for example, "What is one instance in which your organization helped a homeless individual or family transition back into housing?").

During the Interview

- Dress appropriately. If you're interviewing someone in person, dress for the situation. Always be clean and neat, and avoid clothes with logos, graphics, or sayings. To interview a business person, wear a nice pair of pants or a skirt and a button-down shirt or blouse. If your interviewee is someone in the community, dress neatly but less formally.
- Arrive (or call) on time. Don't keep your interviewee waiting. If you are using e-mail, be sure to send the questions on the day you arranged.
- Have the right gear. Be prepared with a notebook and a pen or a pencil. If you are using a tape recorder or video camera, learn how all the controls work before you arrive and give yourself a few extra minutes to set up the equipment.

- Warm up. Always begin by thanking the person for his or her time. If your interview is in person or on the phone, spend a few minutes to get acquainted before you ask your questions. (For example, you might ask whether the person has been interviewed about his or her experiences before or briefly explain your project.) However, in an e-mail, after thanking the person for his or her time, it's best to get right to the point.
- Let the interviewee do the talking. Don't interrupt and be sure to give the person time to answer each question. Use pauses as a chance to take notes, rather than moving straight to the next question. You should also practice active listening—make eye contact and show your interest by nodding your head and making appropriate comments, such as "Uh-huh" and "I see."
- Take notes. If you're not recording the interview, take detailed notes on your interviewee's responses, writing down key information. Be sure to note important or interesting phrases that you may want to quote. The notes are for you to remember the interview later; you do not need to use full sentences or write every word. You may want to practice taking notes before your interview.
- Ask follow-up questions. If an answer makes you think of another question, go ahead and ask it. Don't be afraid to ask questions to clarify your interviewee's answers or to get more information, such as "Can you give me an example?" or "Does that mean that ____?" For e-mail interviews, you may send a second message with follow-up questions based on the interviewee's responses.
- Wrap up. At the end of the interview, thank the interviewee again. Ask if it would be OK to call or e-mail if you have any further questions. Offer to send a copy of your final project–and be sure to follow through!

After the Interview

- Thank your interviewee. Send an e-mail or a card thanking the person for the information he or she shared.
- **Review your notes.** As soon as possible after the interview, read your notes and add any information you remember from the interview but didn't write down at the time. (The sooner you do this the better, as your memory of the conversation will help you make sense of your notes.) You may want to type them and organize them. Write any additional questions that you have.
- If necessary, follow up. If your interviewee has agreed, ask follow-up questions in a phone call or an e-mail. Thank the interviewee for this additional time.
- Evaluate the interview. Reflect on the interview process. What went well? What didn't go well? What will you change the next time you conduct an interview? Write down your reflections in your journal.