Unit F: History of Video Games

Content Area:	CTE
Course(s):	Honors Game Programming in C++
Time Period:	December
Length:	1
Status:	Published

Unit Overview:

• In this unit, students will learn some history of Video Games. Students will learn the evolution from the early days of video games to the present days of the industry. Students will also learn the people on the design team of a video game to the marketing of the games elements and evaluation process.

Enduring Understandings:

- Programming and Gaming has evolved and development over history.
- Students will learn how a video game is developed and that a team is required to develpe many of the most popular games on the market.

Essential Questions:

- How can I transfer what I know to new technological situations/experiences?
- How does technology extend human capabilities? What are the positive and negative consequences of technology? Should technologies that produce negative impact continue to be used?
- In a world of constant technological change, what skills should we learn?

Standards/Indicators/Student Learning Objectives (SLOs):

- SWBAT: identify different game genress
- SWBAT: learn the different pioneers in the video game industry

TECH.8.1.12.A	Technology Operations and Concepts: Students demonstrate a sound understanding of technology concepts, systems and operations.
TECH.8.1.12.B	Creativity and Innovation: Students demonstrate creative thinking, construct knowledge and develop innovative products and process using technology.
TECH.8.1.12.C	Communication and Collaboration: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
TECH.8.1.12.D	Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
TECH.8.1.12.E	Research and Information Fluency: Students apply digital tools to gather, evaluate, and use information.
TECH.8.1.12.F	Critical thinking, problem solving, and decision making: Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.
TECH.8.2.12.A	The Nature of Technology: Creativity and Innovation: Technology systems impact every

	aspect of the world in which we live.
TECH.8.2.12.B	Technology and Society: Knowledge and understanding of human, cultural and society values are fundamental when designing technology systems and products in the global society.
TECH.8.2.12.C	Design: The design process is a systematic approach to solving problems.
TECH.8.2.12.D	Abilities for a Technological World: The designed world is the product of a design process that provides the means to convert resources into products and systems.
TECH.8.2.12.E	Computational Thinking: Programming: Computational thinking builds and enhances problem solving, allowing students to move beyond using knowledge to creating knowledge.

Lesson Titles:

- Lesson: Evolution of the Video Games
- Lesson: Parts of Video Games

Career Readiness, Life Literacies, & Key Skills:

TECH.9.4.12.CI.1	Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).
TECH.9.4.12.CI.2	Identify career pathways that highlight personal talents, skills, and abilities (e.g., 1.4.12prof.CR2b, 2.2.12.LF.8).
TECH.9.4.12.CI.3	Investigate new challenges and opportunities for personal growth, advancement, and transition (e.g., 2.1.12.PGD.1).
TECH.9.4.12.CT	Critical Thinking and Problem-solving
TECH.9.4.12.CT.1	Identify problem-solving strategies used in the development of an innovative product or practice (e.g., 1.1.12acc.C1b, 2.2.12.PF.3).
	Innovative ideas or innovation can lead to career opportunities.
	Collaboration with individuals with diverse experiences can aid in the problem-solving process, particularly for global issues where diverse solutions are needed.
	With a growth mindset, failure is an important part of success.

Inter-Disciplinary Connections:

- Art
- English
- History
- Math
- Music
- Science

LA.RH.11-12

MA.A-SSE

Reading History Seeing Structure in Expressions

MA.A-SSE.B	Write expressions in equivalent forms to solve problems
LA.RST.11-12	Reading Science and Technical Subjects
MA.A-CED	Creating Equations
LA.WHST.11-12	Writing History, Science and Technical Subjects
MA.A-REI	Reasoning with Equations and Inequalities
SCI.9-12.5.1.12.A	Students understand core concepts and principles of science and use measurement and observation tools to assist in categorizing, representing, and interpreting the natural and designed world.
SCI.9-12.5.1.12.C	Scientific knowledge builds on itself over time.
SOC.9-12.1.1	Chronological Thinking
SOC.9-12.1.3	Critical Thinking
SOC.9-12.1.4	Presentational Skills
VPA.1.1.12.B	Music
VPA.1.1.12.D	Visual Art

Equity Considerations

LGBTQ and Disabilities Mandate

Topic: LGBT Gaming community

Materials Used: https://www.qweertygamers.org/

Addresses the Following Component of the Mandate:

- Economic
- Political
- Social

Holocaust Mandate

Topic: Cyber bullying with online gaming

Materials Used: https://www.stopbullying.gov/cyberbullying/cyberbullying-online-gaming

Addresses the Following Component of the Mandate:

- Bias
- Bigotry
- Bullying
- Holocaust Studies
- Prejudice

Climate Change

Topic: How video games are recognizing climate change

Materials Used: https://www.dw.com/en/can-video-games-inspire-climate-action/a-57357630

Addresses the Following Component of the Mandate:

- Economic
- Political
- Social

Asian American Pacific Islander Mandate

Topic: AAPI video games to play

Materials Used: https://www.geekgirlauthority.com/video-games-aapi-heritage-month/

Addresses the Following Component of the Mandate:

- Economic
- Political
- Social

Instructional Strategies, Learning Activities, and Levels of Blooms/DOK:

- Activity: Students own Video Game History Powerpoint
- IS: Extra Time to complete Programs
- IS: NHS Assistance and Tutoring
- IS: One on One tutoring during Delsea One

Modifications

ELL Modifications:

- Choice of test format (multiple-choice, essay, true-false)
- Continue practicing vocabulary
- Provide study guides prior to tests
- Read directions to the student
- Read test passages aloud (for comprehension assessment)
- Vary test formats

IEP & 504 Modifications:

- Allow for redos/retakes
- Assign fewer problems at one time (e.g., assign only odds or evens)
- Differentiated center-based small group instruction
- Extra time on assessments
- Highlight key directions
- If a manipulative is used during instruction, allow its use on a test
- Opportunities for cooperative partner work
- Provide reteach pages if necessary
- Provide several ways to solve a problem if possible
- Provide visual aids and anchor charts
- Test in alternative site
- Tiered lessons and assignments
- Use of a graphic organizer

- Use of concrete materials and objects (manipulatives)
- Use of word processor

G&T Modifications:

- Alternate assignments/enrichment assignments
- Enrichment projects
- Extension activities
- Higher-level cooperative learning activities
- Pairing direct instruction with coaching to promote self-directed learning
- Provide higher-order questioning and discussion opportunities
- Provide texts at a higher reading level
- Tiered assignments
- Tiered centers

At Risk Modifications

- Additional time for assignments
- Adjusted assignment timelines
- Agenda book and checklists
- Answers to be dictated
- Assistance in maintaining uncluttered space
- Books on tape
- Concrete examples
- Extra visual and verbal cues and prompts
- Follow a routine/schedule
- Graphic organizers
- Have students restate information
- No penalty for spelling errors or sloppy handwriting
- Peer or scribe note-taking
- Personalized examples
- Preferential seating
- Provision of notes or outlines
- Reduction of distractions
- Review of directions
- Review sessions
- Space for movement or breaks
- Support auditory presentations with visuals
- Teach time management skills

- Use of a study carrel
- Use of mnemonics
- Varied reinforcement procedures
- Work in progress check

Formative Assessment:

- Anticipatory Set
- Closure
- Pre-Programs
- Program Examples
- Teacher/Student Review
- Warm-Up

Summative Assessment:

- Alternate Assessment
- Benchmark
- Classwork/Homework
- Group Programs
- Large Programs
- Marking Period Assessment
- Quiz: Video Games the Movie
- Small Programs
- Test: History of Video Games

Alternative assessments

Performance tasks Project-based assignments Problem-based assignments Presentations Reflective pieces Concept maps Case-based scenarios Portfolios

Benchmark Assessments

Skills-based assessment Reading response Writing prompt Lab practical

Resources & Materials:

- Games and Graphics in C++ Tony Gaddis
- AGK2 Gaming Library
- Computer Lab
- Google Classroom
- Microsoft Visual Studios
- Powerpoint
- Screen Sharing software
- Various Websites
- Video: Video Game the Movie

Technology:

- Adobe Photoshop
- AGK2 Gaming Library
- Google Classroom
- Microsoft Visual Studios
- Screen Sharing Software
- Various Websites: classroom.google.com; classdojo.com; repl.it

TECH.8.1.12.A	Technology Operations and Concepts: Students demonstrate a sound understanding of technology concepts, systems and operations.
TECH.8.1.12.B	Creativity and Innovation: Students demonstrate creative thinking, construct knowledge and develop innovative products and process using technology.
TECH.8.1.12.C	Communication and Collaboration: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
TECH.8.1.12.D	Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
TECH.8.1.12.E	Research and Information Fluency: Students apply digital tools to gather, evaluate, and use information.
TECH.8.1.12.F	Critical thinking, problem solving, and decision making: Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.
TECH.8.2.12.A	The Nature of Technology: Creativity and Innovation: Technology systems impact every

	aspect of the world in which we live.
TECH.8.2.12.B	Technology and Society: Knowledge and understanding of human, cultural and society values are fundamental when designing technology systems and products in the global society.
TECH.8.2.12.C	Design: The design process is a systematic approach to solving problems.
TECH.8.2.12.D	Abilities for a Technological World: The designed world is the product of a design process that provides the means to convert resources into products and systems.
TECH.8.2.12.E	Computational Thinking: Programming: Computational thinking builds and enhances problem solving, allowing students to move beyond using knowledge to creating knowledge.