

Applied Technology I

Course Description

Our Applied Technology pathway is based on the same curriculum that is being taught at the college level, allowing students who meet the criteria to enroll as part of the dual enrollment program with PCCC. ALL students in either the standard or dual enrollment programs, who complete the 10th & 11th grade pathways are eligible to sit for the COMTIA A+ certification exam. This program is designed for students in 11th grade.

Information Technology Fundamentals and Applications- This course provides IT students with an introduction to information technology fundamentals encompassing both hardware and software. An emphasis is placed on the system unit components, peripheral devices, and systems and applications software. Topics include CPU, RAM, machine cycle, data representations, number systems, operating system characteristics, utility programs, language translators, communication devices, media and networks. Students learn how to: efficiently search the Internet for information, use Microsoft Windows, and use Microsoft productivity software.

Software and hardware maintenance and diagnostics- This course provides students with the knowledge and skills necessary to install, troubleshoot, and upgrade software and hardware components, and to maintain and replace parts for PCs. Students learn how to properly handle system components, use hardware and software diagnostic tools to troubleshoot problems, and fix or replace the failed components. Proper techniques to assemble and disassemble a microcomputer system are also covered. Successful completion of this course prepares students to take the CompTIA (Computing Technology Industrial Association) A+ certification exam and Microsoft Technology Associate (MTA) exam.

This course will build upon students' existing user-level knowledge and experience with personal computer software and hardware in order to present fundamental concepts and techniques that technicians will use every day on the job. Upon completing this course, students will gain the essential skills and technical expertise necessary to install, upgrade, configure, troubleshoot, optimize, repair and perform preventative maintenance on basic personal computer hardware and operating systems.

This course provides students with the basic knowledge and skills necessary for a career in PC support. The course is designed to fully prepare students to sit for and pass the CompTIA A+ 220-901 and 220-902 certification exams. The exam covers a broad range of hardware and software technologies that is not tied to any specific vendor products. Examinees must successfully complete 2 parts for the exam – Essentials and Practical Applications modules. Provided both modules are passed within a 90 day period, successful candidates will receive CompTIA A+ Certification. Course topics include installation, configuration, preventative maintenance of PC hardware components, and the basics of networking, security, virtualization, desktop imaging, and deployment. Students will also gain knowledge of diagnostic and troubleshooting processes for various types of technical issues.

**** it should be noted that students who do not successfully complete classes 107 and 116 cannot go on to classes 160 & 180 as part of the dual enrollment program.***

Applied Technology I

Pacing Guide		
Unit	Topic	Suggested Timing
Unit 1	Information Technology and the IT Professional	approx. 7 weeks
Unit 2	The PC and its Peripherals	approx. 10 weeks
Unit 3	Mobile Devices, Networking and Security	approx. 8 weeks
Unit 4	System Implementation and Maintenance	approx. 10 weeks

Educational Technology Standards

8.1.12.A.1, 8.1.12.A.3, 8.1.12.B.2, 8.1.12.C.1, 8.1.12.D.2, 8.2.12.A.2, 8.2.12.B.2, 8.2.12.C.3

➤ **Technology Operations and Concepts**

- Create a personal digital portfolio which reflects personal and academic interests, achievements, and career aspirations by using a variety of digital tools and resources.
Collaborate in online courses, learning communities, social networks or virtual worlds to discuss a resolution to a problem or issue.

➤ **Creativity and Innovation**

Apply previous content knowledge by creating and piloting a digital learning game or tutorial

➤ **Communication and Collaboration**

- Develop an innovative solution to a real world problem or issue in collaboration with peers and experts, and present ideas for feedback through social media or in an online community.

➤ **Digital Citizenship**

- Demonstrate appropriate application of copyright, fair use and/or Creative Commons to an original work.
- Evaluate consequences of unauthorized electronic access (e.g. hacking)

➤ **Critical Thinking, Problem Solving, Decision Making**

- Evaluate the strengths and limitations of emerging technologies and their impact on educational, career, personal and or social needs.

Career Ready Practices

Career Ready Practices describe the career-ready skills that all educators in all content areas should seek to develop in their students. They are practices that have been linked to increase college, career, and life success. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study.

CRP1. Act as a responsible and contributing citizen and employee

Career-ready individuals understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good.

CRP2. Apply appropriate academic and technical skills.

Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.

CRP3. Attend to personal health and financial well-being.

Career-ready individuals understand the relationship between personal health, workplace performance and personal well-being; they act on that understanding to regularly practice healthy diet, exercise and mental health activities. Career-ready individuals also take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success.

CRP4. Communicate clearly and effectively and with reason.

Career-ready individuals communicate thoughts, ideas, and action plans with clarity, whether using written, verbal, and/or visual methods. They communicate in the workplace with clarity and purpose to make maximum use of their own and others' time. They are excellent writers; they master conventions, word choice, and organization, and use effective tone and presentation skills to articulate ideas. They are skilled at interacting with others; they are active listeners and speak clearly and with purpose. Career-ready

Career Ready Practices

individuals think about the audience for their communication and prepare accordingly to ensure the desired outcome.

CRP5. Consider the environmental, social and economic impacts of decisions.

Career-ready individuals understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization.

CRP6. Demonstrate creativity and innovation.

Career-ready individuals regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization.

CRP7. Employ valid and reliable research strategies.

Career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies. They use reliable research process to search for new information. They evaluate the validity of sources when considering the use and adoption of external information or practices in their workplace situation.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others.

CRP9. Model integrity, ethical leadership and effective management.

Career-ready individuals consistently act in ways that align personal and community-held ideals and principles while employing

Career Ready Practices

strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' action, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture.

CRP10. Plan education and career paths aligned to personal goals.

Career-ready individuals take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals.

CRP11. Use technology to enhance productivity.

Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks.

CRP12. Work productively in teams while using cultural global competence.

Career-ready individuals positively contribute to every team, whether formal or informal. They apply an awareness of cultural difference to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings.

Differentiated Instruction

Strategies to Accommodate Students Based on Individual Needs

<u>Time/General</u>	<u>Processing</u>	<u>Comprehension</u>	<u>Recall</u>
<ul style="list-style-type: none"> Extra time for assigned tasks Adjust length of assignment Timeline with due dates for reports and projects Communication system between home and school Provide lecture notes/outline/copies of slides 	<ul style="list-style-type: none"> Extra Response time Have students verbalize steps Repeat, clarify or reword directions Mini-breaks between tasks Provide a warning for transitions Reading partners 	<ul style="list-style-type: none"> Precise step-by-step directions Short manageable tasks Brief and concrete directions Provide immediate feedback Small group instruction Emphasize multi-sensory learning 	<ul style="list-style-type: none"> Teacher-made checklist Use visual graphic organizers Reference resources to promote independence Visual and verbal reminders Online or hardcopy study cards for practice
<u>Assistive Technology</u>	<u>Tests/Quizzes/Grading</u>	<u>Behavior/Attention</u>	<u>Organization</u>
<ul style="list-style-type: none"> Computer/whiteboard iPad/Kindle Spell-checker Online videos 	<ul style="list-style-type: none"> Extended time Study guides Shortened tests Read directions aloud 	<ul style="list-style-type: none"> Consistent daily structured routine Simple and clear classroom rules Frequent feedback 	<ul style="list-style-type: none"> Individual daily planner Display a written agenda Note-taking assistance Color code materials

Enrichment

Strategies Used to Accommodate Based on Students Individual Needs:

- Adaption of Material and Requirements
- Evaluate Vocabulary
- Elevated Text Complexity
- Additional Projects
- Independent Student Options
- Projects completed individual or with Partners
- Self Selection of Research
- Tiered/Multilevel Activities
- Learning Centers
- Individual Response Board
- Independent Book Studies
- Open-ended activities
- Community/Subject expert mentorships

Assessments

Suggested Formative/Summative Classroom Assessments

- Timelines, Charts, Graphic Organizers
- Teacher-created Unit Assessments, Chapter Assessments, Quizzes
- Teacher-created DBQs, Essays, Short Answer
- Accountable Talk, Debate, Oral Report, Role Playing, Think Pair, and Share
- Projects, Portfolio, Presentations, Prezi, Gallery Walks
- Homework
- Concept Mapping
- Primary and Secondary Source analysis
- Dismantle the major components of a Personal Computer
- Replace key components of a Personal Computer and confirm it is functional
- Configure a computer's BIOS
- Install and configure a direct connect USB printer using printer specific device drivers

Interdisciplinary Connections

English Language Arts

- Question the accuracy and relevance of information
- Incorporate a variety of visual aids in publication
- Build vocabulary by reading a variety of grade-level texts and apply new vocabulary
- Keep a running word wall of industry vocabulary

Social Studies

- Research the history of a given industry/profession
- Research prominent historical individuals in a given industry/profession
- Understand how key events, people and ideas contributed to United States History

World Language

- Translate industry-content
- Create a translated index of industry vocabulary
- Generate a translated list of words and phrases related to workplace safety
- Learn the language of technology as the universal language

Math

- Interpret a graphical representation of a real-world situation
- Convert from binary to digital
- Track and track various data, such as industry's impact on the GDP, career opportunities or among of individuals currently occupying careers

Fine & Performing Arts

- Create a poster recruiting young people to focus their studies on a specific career or industry
- Design a flag or logo to represent a given career field

Science

- Identify ways in which technology has influenced the course of history and improved the quality of life
- Research latest developments in industry technology
- Explain how designing and implementing technology requires weighing trade-offs between positive and negative impacts on humans and the environment
- Investigate applicable-careers in STEM fields

New Jersey Student Learning Standards 9-12

8.1–Educational Technology

Career Cluster: Applied Technology-1

- 8.1.12.A.3: Collaborate in online courses, learning communities, social networks or virtual worlds to discuss a resolution to a problem or issue.
- 8.1.12.B.2: Apply previous content knowledge by creating and piloting a digital learning game or tutorial.
- 8.1.12.C.1: Develop an innovative solution to a real world problem or issue in collaboration with peers and experts, and present ideas for feedback through social media or in an online community.
- 8.1.12.D.5: Analyze the capabilities and limitations of current and emerging technology resources and assess their potential to address personal, social, lifelong learning, and career needs.
- 8.1.12.E.1: Produce a position statement about a real world problem by developing a systematic plan of investigation with peers and experts synthesizing information from multiple sources.
- 8.1.12.F.1: Evaluate the strengths and limitations of emerging technologies and their impact on educational, career, personal and or social needs.

8.2–Technology Education, Engineering, Design, and Computational Thinking-Programming

- 8.2.12.A.2: Analyze a current technology and the resources used, identify to identify trade-offs in terms of availability, cost, desirability and waste
- 8.2.12.B.2: Evaluate ethical considerations regarding the sustainability of environmental resources that are used for the design, creation and maintenance of a chosen product.
- 8.2.12.C.2: Analyze a product and how it has changed or might change over time to meet human needs and wants.
- 8.2.12.C.3: Analyze a product or system for factors such as safety, reliability, economic considerations, quality control, environmental concerns, manufacturability, maintenance and repair, and human factors, engineering (ergonomics).

Common Core State Standards (CCSS)

CCSS - English-Language Arts

Key Ideas and Details:

- CCSS.ELA-LITERACY.RL.11-12.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.
- CCSS.ELA-LITERACY.RL.11-12.2 Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text.

Integration of Knowledge and Ideas:

- CCSS.ELA-LITERACY.W.11-12.7 Integrate and evaluate multiple sources of information presented in different media or formats (e.g. visually, quantitatively) as well as in words in order to address a question or solve a problem.

Text Types and Purposes:

- CCSS.ELA-LITERACY.W.11-12.1 Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
- CCSS.ELA-LITERACY.W.11-12.1B Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases.
- CCSS.ELA-LITERACY.W.11-12.2B Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.
- CCSS.ELA-LITERACY.SL.11-12.6 Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate.

Comprehension and Collaboration:

- CCSS.ELA-LITERACY.SL.11-12.1.A Come to discussion prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.

Comprehension and Collaboration:

- CCSS.ELA-LITERACY.SL.11-12.5 Make strategic use of digital media in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

Common Core State Standards (CCSS)

CCSS - Mathematics

Reason quantitatively and use units to solve problems:

- CCSS.MATH.CONTENT.HSN.Q.A.1 Use units as a way to understand problems and to guide the solution of a multi-step problems: choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.
- CCSS.MATH.CONTENT.HSN.Q.A.3 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

<p>Course: Applied Technology I</p> <p>Unit: 2- The PC and its Peripherals</p> <p>Grade Level: 9-12</p>	<p>Unit Overview:</p> <p>Careers in technology require criteria to show competence and ability to perform at a certain level. This unit will introduce students to the key computer components and peripherals including both their installation and functionality. Students will learn to troubleshoot computer problems as well as learn to evaluate the best fit and install both computer components and peripherals</p>
<p>New Jersey Student Learning Standards (NJSLS): 8.1.12.A.3, , 8.1.12.B.2, 8.1.12.C.1, 8.1.12.D.2, 8.1.12.D.5, 8.1.12.E.1, 8.1.12.F.1, 8.2.12.A.2, 8.2.12.B.2, 8.2.12.C.2, 8.2.12.C.3</p>	
<p>Common Core State Standards (CCSS): RL.11-12.1; RL.11-12.2, RL.11-12.7; W.11-12.1, W.11-12.1B, W.11-12.2B, SL 11-12.6, SL 11-12.1.A, SL 11-12.5 HSN.Q.A.1, HSN.Q.A.3</p>	

Student Learning Objectives (SLOs)	Essential Questions	Skills & Indicators	Sample Activities	Resources
<p>Students will become proficient at installing computer components and peripherals and be able to make recommendations to clients.</p> <p>NJSLS: 8.1.12.A.3, 8.1.12.B.2, 8.1.12.D.5, 8.1.12.F.1, 8.2.12.A.2,</p> <p>CCSS: RL.11-12.1; RL.11-12.2; W.11-12.1B, W,11-12,6 HSN.Q.A.1,</p>	<ul style="list-style-type: none"> ▪ What are the main components of desktop PC's and which peripherals are most likely to be installed with these PC's? ▪ How has the desktop computer changed the way office personnel work? ▪ Has having a PC at your fingertips made you a better 	<ul style="list-style-type: none"> ▪ Correctly install all key components of a Personal Computer ▪ Test a power supply to see if it functions ▪ Select the correct RAM and install additional RAM in a computer ▪ Install a device and it's driver ▪ Install a motherboard ▪ Troubleshoot a bad installation ▪ Install speakers and balance them 	<ul style="list-style-type: none"> ▪ Analyze the efficiency of competing components (such as RAM) and create graphs indicating the strengths and weakness of competing products ▪ Create a cost benefit analysis report based on the tests of competing products ▪ Create an online survey for potential customers to help determine their actual 	<p>Mike Meyers Guide to Managing and Troubleshooting PC's- The Visible PC/Input Devices & Printers- McGraw Hill</p> <p>CYBRARY CompTIA A+ online video training- Hardware installation https://www.cybrary.it/video/install-configure-expansion-cards/ Install input devices https://www.cybrary.it/video</p>

Student Learning Objectives (SLOs)	Essential Questions	Skills & Indicators	Sample Activities	Resources
	<p>student than you were before?</p> <ul style="list-style-type: none"> ▪ What do you do if your computer “turns blue”? ▪ How do you choose the right printer for your use? ▪ What factors affect the quality of LCD monitors? 	<ul style="list-style-type: none"> ▪ Identify all the connectors and devices on a typical PC system unit ▪ Determine the difference between an DIN and mini-DIN connector ▪ What 3 ratios should be considered when purchasing a monitor? 	<p>computer needs in terms of physical size, mobility, speed and other key components as well as costs.</p> <ul style="list-style-type: none"> ▪ Create a product brochure and spec sheet for a home 3-D printer ▪ Write a quick start instruction manual for a new user to set up her PC for initial use 	<p>/input-devices-keyboard-mouse-touch-screen/ Install Output devices https://www.cybrary.it/video/output-devices-printers-speakers/</p> <p>Choosing Computer Components https://www.youtube.com/watch?v=IPIXAtNGGCw</p> <p>CompTIA A+ Certification Printers & Connections and peripherals</p> <p>Technology in Action- Looking at Computers- Pearson</p>
<p>Students will gain a complete understanding of the most common PC components, installation, problem resolution and maintenance.</p> <p>NJSLS: 8.1.12.A.3,</p>	<ul style="list-style-type: none"> ▪ What are the methods for managing and troubleshooting components and peripherals? ▪ How do you 	<ul style="list-style-type: none"> ▪ Identify the external connectors on a PC and the related cables ▪ Explain the functions of each external connection ▪ Follow correct anti- 	<ul style="list-style-type: none"> ▪ Create an electronic chart containing each common electrical component of a PC and its function as well as any safety considerations ▪ Create a jeopardy 	<p>CYBRARY CompTIA A+ online video training</p> <p>Wiring Everything Up https://www.youtube.com/watch?v=ORwtIASQ7js</p> <p>Computer Memory</p>

Student Learning Objectives (SLOs)	Essential Questions	Skills & Indicators	Sample Activities	Resources
<p>8.1.12.B.2, 8.1.12.C.1, 8.1.12.D.5, 8.1.12.E.1, 8.1.12.F.1, 8.2.12.C.2</p> <p>CCSS: RL.11-12.1; RL.11-12.7; W.11-12.1, W.11-12.1B, W.11-12.2B, SL 11-12.1.A, SL 11-12.5 HSN.Q.A..3</p>	<p>explain to a customer when they are at fault in causing a computer crash?</p> <ul style="list-style-type: none"> ▪ What should you do if you do not know how to repair the PC? ▪ What is on the motherboard besides the CPU and memory? ▪ What is Moore's Law and do you think it is still valid? ▪ What is the difference between a real and phantom parity error? 	<p>static safety procedures when adding or removing computer components</p> <ul style="list-style-type: none"> ▪ Once removed from the PC, student should be able to identify each wire and cable as well as their function. ▪ Identify the 4 stages of computer functions ▪ Use a multimeter to read DC voltage 	<p>game for all the components and wiring to identify each and their functions</p> <ul style="list-style-type: none"> ▪ Using you knowledge of computer math, create a conversion chart of MB to GB to TB for both ROM and RAM in a typical PC ▪ Create a table of the 4 functional categories and enter all the components you can followed by a description of how each component contributes to the overall workings of the PC. ▪ Determine the amount of RAM on a given PC. ▪ Identify the types of expansion slots on a motherboard. 	<p>Units https://www.youtube.com/watch?v=fiFlosVbp9w</p>
<p>Student will be able to install and configure a</p>	<ul style="list-style-type: none"> • What are the essential 	<ul style="list-style-type: none"> • Students will be able to install a 	<ul style="list-style-type: none"> • Write about how to select the best 	<p>Mike Meyers Guide to Managing and</p>

Student Learning Objectives (SLOs)	Essential Questions	Skills & Indicators	Sample Activities	Resources
<p>video subsystem in a PC</p> <p>NJSLS: 8.1.12.A.3, 8.1.12.B.2, 8.1.12.C.1,8.1.12.D.5, 8.1.12.E.1, 8.1.12.F.1,8.2.12.C.2. 8.2.12.C.3</p> <p>CCSS: RL.11-12.1; RL.11-12.7; W.11-12.1, W.11-12.1B, W.11-12.2B, SL 11-12.6, SL 11-12.1.A, SL 11-12.5 HSN.Q.A..3</p>	<p>characteristics and functions of a video subsystem?</p> <ul style="list-style-type: none"> • Has easy access to video recording <p>changed our country’s attitude toward contemporary social issues?</p> <ul style="list-style-type: none"> • Why do “gamers” require different video cards than business users? 	<p>functional video card with correct drivers</p> <ul style="list-style-type: none"> • Students will be able to identify the multiple types of video connectors and determine the “best fit” for customer needs • Install multiple monitors with both a single video card with multiple graphics ports as well as a dual monitor system with dual graphics boards • Evaluate the required type of video card and memory based on given criteria of output. 	<p>video card and monitor combinations for different needs</p> <ul style="list-style-type: none"> • Research different social situations that have been ‘caught on camera” and how it has impacted society; The Oswald killing, the Rodney King beating, Acts of kindness, etc) • Produce a video about the history of gaming or games in education 	<p>Troubleshooting PC’s- McGraw Hill</p> <p>CYBRARY CompTIA A+ online video training https://www.cybrary.it/course/comptia-aplus/</p> <p>Fact or Fiction, Video Games are the Education of the Future http://www.scientificamerican.com/article/fact-or-fiction-video-games-are-the-future-of-education/</p> <p>The Videos That Are Putting Race and Policing Into Sharp Relief http://www.nytimes.com/interactive/2015/07/30/us/police-videos-race.html?_r=0</p> <p>Graphics Card Installation + Dual</p>

Student Learning Objectives (SLOs)	Essential Questions	Skills & Indicators	Sample Activities	Resources
				Monitor Set Up! https://www.youtube.com/watch?v=aqTgryyMM6c

Unit 2 Vocabulary

action
 adventure
 analog control
 anime
 A.I. (artificial intelligence)
 A gaming system (console, PC, etc.) that supports games that were made for the previous version of the system.
 beta
 bundling
 C.G. (computer graphics)
 console
 cut-scene

educational game
 edutainment
 E.S.R.B. (Entertainment Software Ratings Board)
 genre
 G.U.I. (Graphical User Interface)
 Graphical interface for the gamer to interact with the computer program onscreen.
 M.M.O.G. (Massively Multiplayer Online Game)
 RTS (Real Time Strategy Games)
 sandbox
 simulation game

Suggested Unit Projects

Choose At Least One

Create a presentation using video and graphics to discuss the social implications of video projection or create an educational video game to teach fellow students about computer hardware installation

Write a report on Gaming for Education, advantages and disadvantages

Suggested Structured Learning Experiences

Watch a series of TED talks on Games for Education and perhaps schedule a Skype meeting with several of the speakers.

Grey Sky Productions LLC
 114 Beach St, Rockaway, NJ 07866
[\(973\) 625-6911](tel:(973)625-6911)
<http://www.greyskyfilms.com/>

Microsoft District Office
 Computer Training School
 101 S Wood Ave #900, Iselin, NJ 08830
 Phone : [\(732\) 635-9033](tel:(732)635-9033)