Unit 5: Computer Graphics & Digital Photography in the Workplace

Content Area: **Art**
Course(s): **Advanced Computer Graphics/Digital Photography**
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Title Section

Department of Curriculum and Instruction

Belleville Public Schools

Curriculum Guide

Advanced Computer Graphics & Digital Photography

Unit 5: Computer Graphics & Digital Photography Careers

Belleville Board of Education

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Unit Overview

In Unit 5, students will gain a deeper understanding of the careers that are open to people who possess computer graphic and digital photography skills.

Students will choose a company in an industry of their choice whose branding and logo they will re-design. Students will research challenges that exist in the industry and in the company they have chosen, and develop a series of images that might be employed in real life. Branding, logo design, business cards, package design and advertising are among the projects that will be considered.

Enduring Understanding

- Branding is a marketing practice in which a company creates a name, symbol or design that is easily

identifiable and helps to identify a product and distinguish it from competitors.
- A logo is often the first touchpoint a potential customer or client will have with a brand.
- Marketing is the process of teaching consumers why they should choose a product or service.
- Branding and marketing materials include letterheads, envelopes, business cards, brochures and other "business collateral."
- Type, colors, and imagery communicate the personality of a product or brand.
- A clear understanding of the personality or image you want to project is essential to developing successful imagery.
- A digital portfolio showcases an artist's work for potential schools and employers.
- A portfolio is required for entrance to college art programs as well as for employment in the fields of visual art and graphic design.
- Learning and expanding one's knowledge and skill is important throughout life.
- The internet is an unlimited source for learning skills and for research.

Essential Questions

- What kind of employment opportunities depend on computer graphics and digital photography skills?
- What is branding?
- Why is a logo important for a company?
- What does marketing include?
- What can different colors and color combinations communicate?
- How does type affect the way print is perceived?
- What should an applicant find out about a prospective employer?
- What should an applicant find out about a prospective art school or department?
- What is a digital portfolio?
- What does my artwork say about me?

Exit Skills

By the end of this unit, the Advanced Computer Graphics and Digital Photography student should be able to:

- Use self-assessment skills to evaluate and improve digital artwork.
- Judge the impact of color, type and imagery on marketing and branding materials.
- Hypothesize the audience that a real-life company or industry is trying to reach.
- Invent imagery that conveys a desired image or personality.
- Produce digital images that are appropriate for product or company branding.
- Create a logo that represents a person, product or company.

New Jersey Student Learning Standards (NJSLS-S)

VPA.1.1.12.D.CS2	Stimuli for the creation of artworks can come from many places, including other arts disciplines.
VPA.1.2.12.A.1	Determine how dance, music, theatre, and visual art have influenced world cultures throughout history.
VPA.1.2.12.A.2	Justify the impact of innovations in the arts (e.g., the availability of music online) on societal norms and habits of mind in various historical eras.
VPA.1.2.12.A.CS2	Access to the arts has a positive influence on the quality of an individual's lifelong learning, personal expression, and contributions to community and global citizenship.
VPA.1.3.12.D.1	Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.
VPA.1.3.12.D.2	Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.
VPA.1.3.12.D.3	Organize an exhibit of personal works of visual art that convey a high level of understanding of how the expression of ideas relates to the art media, art mediums, and techniques used.
VPA.1.3.12.D.5	Identify the styles and artistic processes used in the creation of culturally and historically diverse two- and three-dimensional artworks, and emulate those styles by creating an original body of work.
VPA.1.3.12.D.CS1	How individuals manipulate the elements of art and principles of design results in original portfolios that reflect choice and personal stylistic nuance.
VPA.1.3.12.D.CS3	The artist's understanding of the relationships among art media, methodology, and visual statement allows the artist to use expressionism, abstractionism (nonobjective art), realism/naturalism, impressionism, and other genre styles to convey ideas to an audience.
VPA.1.3.12.D.CS4	Artists interpret/render themes using traditional art media and methodologies as well as new art media and methodologies.
VPA.1.3.12.D.CS5	Two- and three-dimensional artworks can be rendered culturally specific by using the tools, techniques, styles, materials, and methodologies that are germane to a particular cultural style.
VPA.1.4.12.A.4	Evaluate how exposure to various cultures influences individual, emotional, intellectual, and kinesthetic responses to artwork.
VPA.1.4.12.A.CS1	Recognition of fundamental elements within various arts disciplines (dance, music, theatre, and visual art) is dependent on the ability to decipher cultural implications embedded in artworks.
VPA.1.4.12.A.CS3	Artistic styles, trends, movements, and historical responses to various genres of art evolve over time.
VPA.1.4.12.B.2	Evaluate how an artist's technical proficiency may affect the creation or presentation of a work of art, as well as how the context in which a work is performed or shown may impact perceptions of its significance/meaning.

VPA.1.4.12.B.3	Determine the role of art and art-making in a global society by analyzing the influence of technology on the visual, performing, and multimedia arts for consumers, creators, and performers around the world.
VPA.1.4.12.B.CS2	The cohesiveness of a work of art and its ability to communicate a theme or narrative can be directly affected by the artist's technical proficiency as well as by the manner and physical context in which it is performed or shown.
VPA.1.4.12.B.CS3	Art and art-making reflect and affect the role of technology in a global society.

Interdisciplinary Connections

Career Readiness. English Language Arts

LA.RH.11-12.3	Evaluate various perspectives for actions or events; determine which explanation best accords with textual evidence, acknowledging where the text leaves matters uncertain.
LA.RH.11-12.7	Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, qualitatively, as well as in words) in order to address a question or solve a problem.
LA.RH.11-12.9	Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources.
LA.RST.11-12.2	Determine the central ideas, themes, or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
LA.RST.11-12.3	Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
LA.RST.11-12.4	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics.

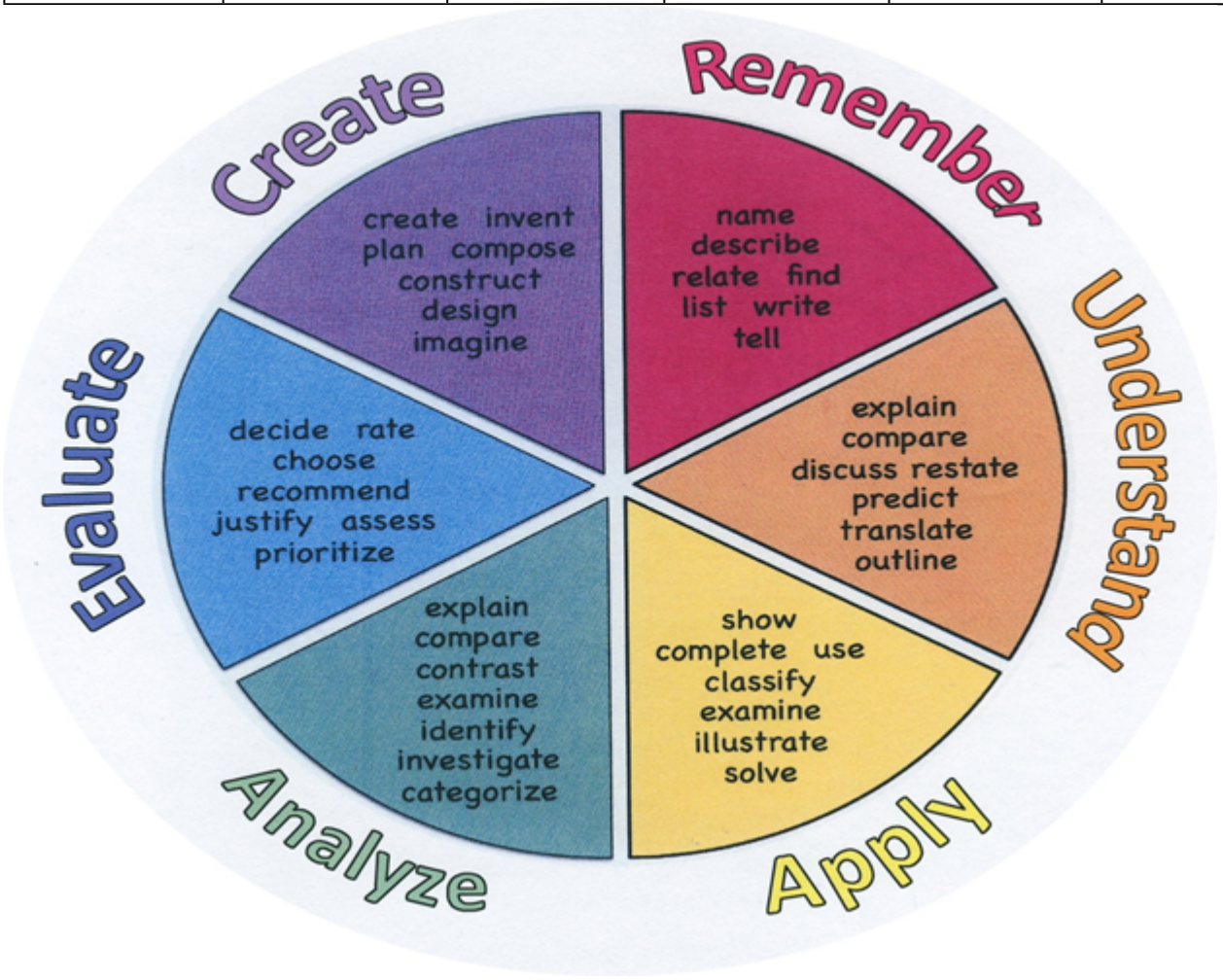
Learning Objectives

Students will demonstrate the ability to:

- Determine the skills needed in various visual arts fields.
- Plan a series of project goals to showcase graphic design skills.
- Develop a logo and other distinctive visual imagery for the purpose of branding or promoting a product or company.
- Assess the ability of logos, colors, and typography to convey a desired image or personality.
- Justify design decisions with respect to an identified audience or marketplace.

Remember	Understand	Apply	Analyze	Evaluate	Create
Choose	Classify	Choose	Categorize	Appraise	Combine
Describe	Defend	Dramatize	Classify	Judge	Compose
Define	Demonstrate	Explain	Compare	Criticize	Construct
Label	Distinguish	Generalize	Differentiate	Defend	Design
List	Explain	Judge	Distinguish	Compare	Develop
Locate	Express	Organize	Identify	Assess	Formulate
Match	Extend	Paint	Infer	Conclude	Hypothesize
Memorize	Give Examples	Prepare	Point out	Contrast	Invent

Name Omit Recite Select State Count Draw Outline Point Quote Recall Recognize Repeat Reproduce	Illustrate Indicate Interrelate Interpret Infer Match Paraphrase Represent Restate Rewrite Select Show Summarize Tell Translate Associate Compute Convert Discuss Estimate Extrapolate Generalize Predict	Produce Select Show Sketch Solve Use Add Calculate Change Classify Complete Compute Discover Divide Examine Graph Interpolate Manipulate Modify Operate Subtract	Select Subdivide Survey Arrange Breakdown Combine Detect Diagram Discriminate Illustrate Outline Point out Separate	Critique Determine Grade Justify Measure Rank Rate Support Test	Make Originate Organize Plan Produce Role Play Drive Devise Generate Integrate Prescribe Propose Reconstruct Revise Rewrite Transform



Suggested Activities & Best Practices

- Have students choose an industry that interests them and investigate logos and branding/marketing imagery used in that industry.
- Conference with students to develop a plan (or contract) for branding or marketing a real or fictitious company. Projects for one company should share a theme, type and colors.
- Give students a list of design websites and blogs for reference.
- Students to keep journals of observations and ideas.

Projects may include:

- Branding and identity project, including a new logo, typography, colors, and overall look and feel (a "Style Guide" for the brand.)
- Design a Facebook Ad for a theoretical or an existing product
- Instagram ad
- Print poster
- Display banners with animation
- Postcard
- Business cards and stationery
- Brochure
- Promotional photographs

Assessment Evidence - Checking for Understanding (CFU)

- Student journals - observations and ideas, sites visited, research (formative assessment)
- Written descriptions of companies' branding presence on the Internet (formative assessment)
- Conferences to identify projects, goals, and assessment criteria (alternative assessment)
- Evaluation rubrics for individual projects (summative assessment)
- Self-assessments (formative assessment)

- Final exam (summative assessment)

- Admit Tickets
- Anticipation Guide
- Common Benchmarks
- Compare & Contrast
- Create a Multimedia Poster
- DBQ's
- Define
- Describe
- Evaluate
- Evaluation rubrics
- Exit Tickets
- Explaining
- Fist- to-Five or Thumb-Ometer
- Illustration
- Journals
- KWL Chart
- Learning Center Activities
- Multimedia Reports
- Newspaper Headline
- Outline
- Question Stems
- Quickwrite
- Quizzes
- Red Light, Green Light
- Self- assessments
- Socratic Seminar
- Study Guide
- Surveys
- Teacher Observation Checklist
- Think, Pair, Share
- Think, Write, Pair, Share
- Top 10 List
- Unit review/Test prep
- Unit tests
- Web-Based Assessments
- Written Reports

Primary Resources & Materials

- Apple computers
- Adobe software
- Internet connection
- Google sites for image storage

Ancillary Resources

- Logo Powerpoint
- Other PowerPoints
- Rubric template
- Group critique guidelines
- Visiting speakers from the design industry and/or design schools

Technology Infusion

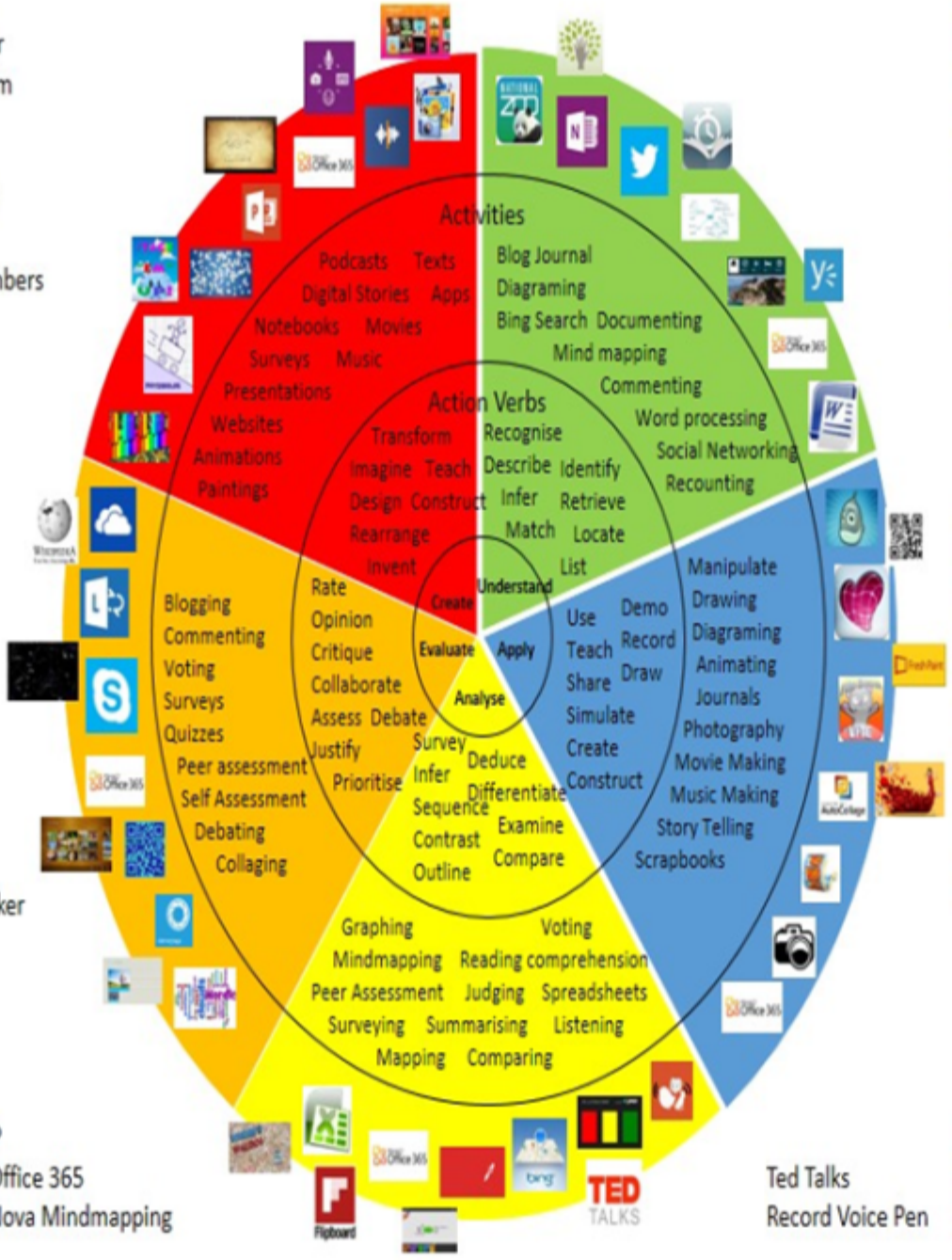
Following is a partial list of design-related links;

- justcreative.com
- looka.com
- howdesign.com
- rookieup.com/blog
- creativebloq.com
- blog.hubspot.com
- 99designs.com/blog
- logobee.com
- artprof.org
- brandingmag.com
- looka.com
- udemy.com
- design.tutsplus.com

Win 8.1 Apps/Tools Pedagogy Wheel

Podcasts
Photostory 3
Kid Story Builder
Music Maker Jam
Paint A Story
Office 365
MS PowerPoint
Stack 'Em Up
NqSquared Numbers
Physamajig
Xylophone 8

Wikipedia
Skydrive
Lync
SkyMap
Skype
Office 365
Puzzle Touch
Easy QR
Memorylage
Life Moments
Word Cloud Maker



Where's Waldo?
MS Excel Office 365
Flipboard Nova Mindmapping

Ted Talks
Record Voice Pen

Originally taken from http://www.coetail.com/vzimmer/files/2013/02/iPadagogy-Wheel.001.jpg
And adapted for Windows 8.1 devices by Charlotte Beckhurst @CharBeckhurst

Alignment to 21st Century Skills & Technology

- Career Readiness
- Critical thinking and creativity
- Problem Solving
- Self-guided learning
- Information literacy
- Media Literacy

CRP.K-12.CRP1	Act as a responsible and contributing citizen and employee.
CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP4	Communicate clearly and effectively and with reason.
CRP.K-12.CRP5	Consider the environmental, social and economic impacts of decisions.
CRP.K-12.CRP6	Demonstrate creativity and innovation.
CRP.K-12.CRP7	Employ valid and reliable research strategies.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP.K-12.CRP10	Plan education and career paths aligned to personal goals.
CRP.K-12.CRP11	Use technology to enhance productivity.
CAEP.9.2.12.C.2	Modify Personalized Student Learning Plans to support declared career goals.
CAEP.9.2.12.C.4	Analyze how economic conditions and societal changes influence employment trends and future education.
CAEP.9.2.12.C.7	Examine the professional, legal, and ethical responsibilities for both employers and employees in the global workplace.
TECH.8.1.12	Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.
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.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	Technology Education, Engineering, Design, and Computational Thinking - Programming: All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.
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.

21st Century Skills/Interdisciplinary Themes

Upon completion of this section, please remove all remaining descriptions, notes, outlines, examples and/or illustrations that are not needed or used.

Please list only the **21st Century/Interdisciplinary Themes** that will be incorporated into this unit.

- Communication and Collaboration
- Creativity and Innovation
- Critical thinking and Problem Solving
- ICT (Information, Communications and Technology) Literacy
- Information Literacy
- Life and Career Skills
- Media Literacy

21st Century Skills

Upon completion of this section, please remove all remaining descriptions, notes, outlines, examples and/or illustrations that are not needed or used.

Please list only the **21st Century Skills** that will be incorporated into this unit.

- Civic Literacy
- Environmental Literacy
- Financial, Economic, Business and Entrepreneurial Literacy
- Global Awareness
- Health Literacy

Differentiation

- Independent projects tailored to each student
- Check work frequently to ensure understanding
- Assignments tailored to the individual
- Pairing oral instructions with visual
- Additional time to complete tutorials and assignments

Differentiations:

- Small group instruction
- Small group assignments
- Extra time to complete assignments
- Pairing oral instruction with visuals
- Repeat directions
- Use manipulatives
- Center-based instruction
- Token economy
- Study guides
- Teacher reads assessments allowed
- Scheduled breaks
- Rephrase written directions
- Multisensory approaches
- Additional time
- Preview vocabulary
- Preview content & concepts
- Story guides
- Behavior management plan
- Highlight text
- Student(s) work with assigned partner
- Visual presentation
- Assistive technology
- Auditory presentations
- Large print edition
- Dictation to scribe
- Small group setting

Hi-Prep Differentiations:

- Alternative formative and summative assessments
- Choice boards
- Games and tournaments
- Group investigations
- Guided Reading
- Independent research and projects
- Interest groups
- Learning contracts
- Leveled rubrics
- Literature circles
- Multiple intelligence options
- Multiple texts
- Personal agendas
- Project-based learning
- Problem-based learning
- Stations/centers
- Think-Tac-Toes
- Tiered activities/assignments
- Tiered products

- Varying organizers for instructions

Lo-Prep Differentiations

- Choice of books or activities
- Cubing activities
- Exploration by interest
- Flexible grouping
- Goal setting with students
- Jigsaw
- Mini workshops to re-teach or extend skills
- Open-ended activities
- Think-Pair-Share
- Reading buddies
- Varied journal prompts
- Varied supplemental materials

Special Education Learning (IEP's & 504's)

- Additional time for mastery of Photoshop skills and techniques
- Preview of content, concepts and vocabulary of tutorials to be used
- Modified assignment format: assignments will be tailored to each student's capabilities

- printed copy of board work/notes provided
- additional time for skill mastery
- assistive technology
- behavior management plan
- Center-Based Instruction
- check work frequently for understanding
- computer or electronic device utilizes
- extended time on tests/ quizzes
- have student repeat directions to check for understanding
- highlighted text visual presentation
- modified assignment format
- modified test content
- modified test format
- modified test length

- multi-sensory presentation
- multiple test sessions
- preferential seating
- preview of content, concepts, and vocabulary
- Provide modifications as dictated in the student's IEP/504 plan
- reduced/shortened reading assignments
- Reduced/shortened written assignments
- secure attention before giving instruction/directions
- shortened assignments
- student working with an assigned partner
- teacher initiated weekly assignment sheet
- Use open book, study guides, test prototypes

English Language Learning (ELL)

- Video tutorials will be chosen over written instructions
- Written handouts will be translated using Google translate when necessary
- Lengthy reading assignments will be omitted
- Utilize Foreign Language design websites

- teaching key aspects of a topic. Eliminate nonessential information
- using videos, illustrations, pictures, and drawings to explain or clarif
- allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slide shows, videos, etc.) to demonstrate student's learning;
- allowing students to correct errors (looking for understanding)
- allowing the use of note cards or open-book during testing
- decreasing the amount of workpresented or required
- having peers take notes or providing a copy of the teacher's notes
- modifying tests to reflect selected objectives
- providing study guides
- reducing or omitting lengthy outside reading assignments
- reducing the number of answer choices on a multiple choice test
- tutoring by peers
- using computer word processing spell check and grammar check features
- using true/false, matching, or fill in the blank tests in lieu of essay tests

At Risk

- Reduced amount of work required
- Use of videos and pictures to explain techniques

- Students will be allowed to select projects from a number of options.

- allowing students to correct errors (looking for understanding)
- teaching key aspects of a topic. Eliminate nonessential information
- allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slide shows, videos, etc.) to demonstrate student's learning
- allowing students to select from given choices
- allowing the use of note cards or open-book during testing
- collaborating (general education teacher and specialist) to modify vocabulary, omit or modify items to reflect objectives for the student, eliminate sections of the test, and determine how the grade will be determined prior to giving the test.
- decreasing the amount of workpresented or required
- having peers take notes or providing a copy of the teacher's notes
- marking students' correct and acceptable work, not the mistakes
- modifying tests to reflect selected objectives
- providing study guides
- reducing or omitting lengthy outside reading assignments
- reducing the number of answer choices on a multiple choice test
- tutoring by peers
- using authentic assessments with real-life problem-solving
- using true/false, matching, or fill in the blank tests in lieu of essay tests
- using videos, illustrations, pictures, and drawings to explain or clarify

Talented and Gifted Learning (T&G)

- Assignments for gifted and talented students will require advanced problem solving
- Critical & creative thinking necessary: identifying design problems, finding resources, and applying new skills.
- Projects tailored to the individual student

- Above grade level placement option for qualified students
- Advanced problem-solving
- Allow students to work at a faster pace
- Cluster grouping
- Complete activities aligned with above grade level text using Benchmark results
- Create a blog or social media page about their unit
- Create a plan to solve an issue presented in the class or in a text
- Debate issues with research to support arguments
- Flexible skill grouping within a class or across grade level for rigor
- Higher order, critical & creative thinking skills, and discovery

- Multi-disciplinary unit and/or project
- Teacher-selected instructional strategies that are focused to provide challenge, engagement, and growth opportunities
- Utilize exploratory connections to higher-grade concepts
- Utilize project-based learning for greater depth of knowledge

Sample Lesson

Using the template below, please develop a **Sample Lesson** for the first unit only.

Unit Name:

NJSLS:

Interdisciplinary Connection:

Statement of Objective:

Anticipatory Set/Do Now:

Learning Activity:

Student Assessment/CFU's:

Materials:

21st Century Themes and Skills:

Differentiation/Modifications:

Integration of Technology: