

Unit 1: Planning a Site and Technology Tools

Content Area: **Technology**
Course(s): **Web Page Design**
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Length: **20 Days**
Status: **Published**

Title Section

Department of Curriculum and Instruction



Belleville Public Schools

Curriculum Guide

Unit 1: Planning a Site and Technology Tools

Web Page Design

Belleville Board of Education

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Unit Overview

Students will define and understand basic site evaluation and rubric creation. Students will understand color theory for marketing websites.

Students will recognize and understand web standards through Google Sites. Finally, students will plan a website using the Google platform such as Google slides, sheets, docs, and sites.

Enduring Understanding

Students will understand that.....

Color format and keeping it above the fold is a form of needed aspects of a successful website

Google platform (sites) is a new way to have companies stay organized by using company websites and online documents

Basic Photoshop features will enhance website structure and digital view

Essential Questions

1. How has the Internet and web design evolved over the past 40 years?
2. What criteria can be applied to a website to determine its quality?
3. How do colors affect the viewer's impression of a website?
4. What is HTML and how is it used?
5. How should content be organized on a website?
6. How is Google Docs used in everyday business world?

7. How will color scheme and marketing tools help drive traffic to your website?

Exit Skills

By the end of Unit 1 Web Page Design Students will be able to

- Have an overview of basic Site Evaluation and Rubric Creation
- Demonstrate and discuss Color Theory for Marketing Websites
- Understand Web Standards & Accessible Design
- Develop steps to Planning a Website
- Demonstrate Google Docs Usage

| | |
|-----------------|--|
| 9.3.12.BM.1 | Utilize mathematical concepts, skills and problem solving to obtain necessary information for decision-making in business. |
| 9.3.12.BM.2 | Describe laws, rules and regulations as they apply to effective business operations. |
| 9.3.12.BM.3 | Explore, develop and apply strategies for ensuring a successful business career. |
| 9.3.12.BM.5 | Implement systems, strategies and techniques used to manage information in a business. |
| 9.3.12.BM-ADM | Administrative Support |
| 12.9.3.MK.7 | Determine and adjust prices to maximize return while maintaining customer perception of value. |
| 12.9.3.MK.8 | Obtain, develop, maintain and improve a product or service mix in response to market opportunities. |
| 12.9.3.MK.9 | Communicate information about products, services, images and/or ideas to achieve a desired outcome. |
| 12.9.3.MK.10 | Use marketing strategies and processes to determine and meet client needs and wants. |
| 12.9.3.MK-MER.4 | Access, evaluate and disseminate marketing information to facilitate merchandising decisions and activities. |
| 12.9.3.MK-MGT.2 | Plan, manage and monitor day-to-day marketing management operations. |
| 12.9.3.MK-MGT.3 | Plan, manage and organize to meet the requirements of the marketing plan. |
| 12.9.3.MK-RES.2 | Design and conduct research activities to facilitate marketing business decisions. |

Interdisciplinary Connections

| | |
|---------------|--|
| LA.RH.11-12.1 | Accurately cite strong and thorough textual evidence, (e.g., via discussion, written response, etc.), to support analysis of primary and secondary sources, connecting insights gained from specific details to develop an understanding of the text as a whole. |
| LA.RH.11-12.2 | Determine the theme, central ideas, information and/or perspective(s) presented in a primary or secondary source; provide an accurate summary of how key events, ideas and/or author's perspective(s) develop over the course of the text. |
| 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.11-12.4 | Determine the meaning of words and phrases as they are used in a text, including analyzing how an author uses and refines the meaning of a key term over the course of a text (e.g., how Madison defines faction in Federalist No. 10). |
| LA.RH.11-12.5 | Analyze in detail how a complex primary source is structured, including how key sentences, paragraphs, and larger portions of the text contribute to the whole. |
| LA.RST.11-12 | Reading Science and Technical Subjects |
| MA.S-IC.A | Understand and evaluate random processes underlying statistical experiments |
| MA.S-ID.A.2 | Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. |
| MA.S-ID.A.4 | Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a |

procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve.

MA.S-ID.B.6a

Fit a function to the data (including with the use of technology); use functions fitted to data to solve problems in the context of the data.

MA.S-ID.B.6b

Informally assess the fit of a function by plotting and analyzing residuals, including with the use of technology.

MA.S-ID.B.6c

Fit a linear function for a scatter plot that suggests a linear association.

MA.S-ID.C

Interpret linear models

Learning Objectives

Students will be able to.....

1. Identify types and purposes of websites
2. Discuss web browsers and identify their purposes
3. Define HTML, XHTML
4. Describe tools used to create HTML documents
5. Discuss the five phases of the web development life cycle
6. Identify the technological advances that have made web design more user friendly
7. Describe the affect colors have on the end users experience
8. Define the types of navigation available on web pages
9. Identify the different types of usage with Google Docs, Sheets, Slides

10. Define the history of operating systems and the importance of them

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



Suggested Activities & Best Practices

Students will be given standard website rubric to follow along using Google Sites

Students will research other websites in group setting by using the Google Platform

Assessment Evidence - Checking for Understanding (CFU)

-Students will be given hands on quizzes as well as written quizzes that will be used to enhance student knowledge-benchmark assessments

-Students will compare and contrast websites that are used today compared to prior years-alternate assessment

Unit tests-summative assessment

Think, pair, share-formative 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

Google platform resource tools for websites

Youtube Video Channels

Belleville Learning Academy website for resources

Wix.com guideline articles/videos

Coding platforms

Ancillary Resources

Google Tutorial resources

Hands on production and back-end control of websites

Wix.com and Google sites videos on a step by step on how the website dashboard works

Technology Infusion

Computer for coding and website use

Computer Hardware to focus on website control platform

SmartBoard to show students past work for comparison

Internet to be able to use all resources related to Wix.com and Google Sites

Google Accounts for students to share documents

Server for internet use on website topics

Wix.com account to create and update website

Website Builder to build and maintain all websites and coding platforms

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
 Flipboard
 Office 365
 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

| | |
|-----------------|---|
| CRP.K-12.CRP1.1 | 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. |
| CRP.K-12.CRP2 | Apply appropriate academic and technical skills. |
| CRP.K-12.CRP2.1 | 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. |
| CRP.K-12.CRP4 | Communicate clearly and effectively and with reason. |
| CRP.K-12.CRP7 | Employ valid and reliable research strategies. |
| CRP.K-12.CRP7.1 | 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. |
| CRP.K-12.CRP9 | Model integrity, ethical leadership and effective management. |
| CRP.K-12.CRP9.1 | Career-ready individuals consistently act in ways that align personal and community-held ideals and principles while employing 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. |
| CAEP.9.2.12.C.1 | Review career goals and determine steps necessary for attainment. |
| CAEP.9.2.12.C.2 | Modify Personalized Student Learning Plans to support declared career goals. |
| CAEP.9.2.12.C.3 | Identify transferable career skills and design alternate career plans. |
| CAEP.9.2.12.C.4 | Analyze how economic conditions and societal changes influence employment trends and future education. |
| CAEP.9.2.12.C.6 | Investigate entrepreneurship opportunities as options for career planning and identify the knowledge, skills, abilities, and resources required for owning and managing a business. |
| CAEP.9.2.12.C.7 | Examine the professional, legal, and ethical responsibilities for both employers and employees in the global workplace. |
| CAEP.9.2.12.C.8 | Assess the impact of litigation and court decisions on employment laws and practices. |
| CAEP.9.2.12.C.9 | Analyze the correlation between personal and financial behavior and employability. |

21st Century Skills/Interdisciplinary Themes

- 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

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

Differentiation

-Students will work in small groups to complete Wix.com and Google sites projects. Students may create additional pages within the website.

-Students will have different levels when updating website throughout the year.

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)

-Students will be given additional time to master the parts of a successful website along with all pages that are needed to follow rubric

-Printed copy of notes and videos will be available for students to follow along with at their own pace

- 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
- multiple test sessions
- multi-sensory presentation
- 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)

-Student will be assisted by peers, fluent in native language to understand all parts and pages of a website

-Students will be allowed to correct all errors until students become proficient in the use of dashboard for the website

- teaching key aspects of a topic. Eliminate nonessential information
- using videos, illustrations, pictures, and drawings to explain or clarify
- 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 work presented 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

-Students will be given option to use illustrations or video lessons for website builder

-Students will select their own website idea for the creation process and dashboard control

- 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 work presented 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)

-Students will be given an advanced list of website guidelines to complete at faster pace

-Students will troubleshoot any and all issues that arise when operating Google sites or Wix.com dashboard manager

- 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

Unit Name: Web Development and HTML

NJSLS:

Interdisciplinary Connection: Math, English, Social Studies

Statement of Objective: Students will be able to partake in Hour of Code online session and earn their certificate. HTML basic code writing will be shown on SMARTBOARD.

Anticipatory Set/Do Now: Students will complete vocabulary on HTML and WIX word database. Students will work in group settings.

Learning Activity: #1 Do Now, #2 Computer Hands on Activity, #3 Class Discussion #4 Peer review.

Student Assessment/CFU's:

Materials: SmartBoard, Book, Handouts, Computers,

21st Century Themes and Skills:

Differentiation:

- * Hands on Activities
- * Group Work
- * Different level of questions
- * Direct Instruction
- * Application of concepts

Integration of Technology: Computers, SmartBoard, Internet,