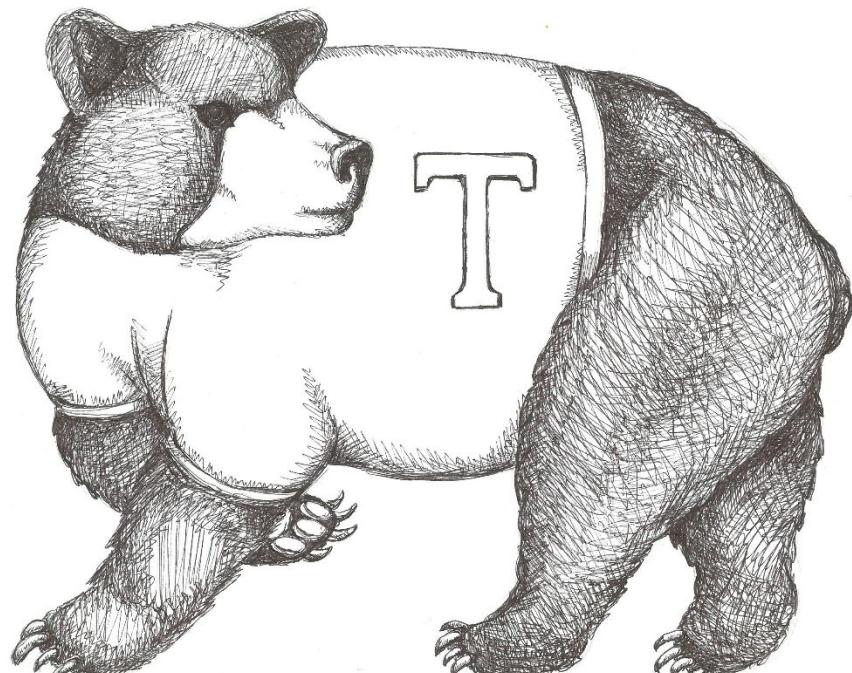


Thomaston Public Schools

158 Main Street

Thomaston, Connecticut 06787

www.thomastonschools.org – 860-283-4796



Thomaston Public Schools Curriculum

**Thomaston High School
Grade 6: Technology 2015**

Learn to Live, Live to Learn

Acknowledgements

Curriculum Writer(s):

Michelle Dayton

We acknowledge and celebrate the professionalism, expertise, and diverse perspectives of these teachers. Their contributions to this curriculum enrich the educational experiences of all Thomaston students.

Alisha DiCorpo _____
Alisha L. DiCorpo
Director of Curriculum and Professional Development

Date of Presentation to the Board of Education: December 2015

Technology Curriculum Grade 6

Board of Education Mission Statement:

IN A PARTNERSHIP OF FAMILY, SCHOOL AND COMMUNITY, OUR MISSION IS TO EDUCATE, CHALLENGE AND INSPIRE EACH INDIVIDUAL TO EXCEL AND BECOME A CONTRIBUTING MEMBER OF SOCIETY.

Departmental Philosophy:

The Thomaston Public School District Technology Curriculum is designed to promote technological and information literacy utilizing the 21st Century Skills of critical thinking, problem solving, collaboration, leadership, adaptability, entrepreneurialism effective oral and written communication, accessing and analyzing information, curiosity and imagination. These skills will enable our students to compete in an ethical and responsible manner in our ever-changing global economy. Our curriculum seeks to promote academic success by embedding technology tools and applications into the teaching and learning process.

All students will develop technology skills in a wide-range of contexts while simultaneously strengthening understanding of essential academic knowledge and skills. This real-world approach allows classroom teachers to enhance the learning process, enrich the academic experience, and provide students with the skills necessary to succeed in life. Students are active participants in the learning process and learn to efficiently access, explore, apply, and synthesize information in our digital world. They will become resourceful learners, utilizing information, media, and technology literacy and will become responsible citizens demonstrating the characteristics of pride, leadership, confidence, respect, motivation and flexibility.

Course Description:

This course examines available resources in the Library Media Center. Students will learn to locate, access, evaluate, synthesize and use information effectively. Students will work collaboratively to create innovation projects and presentations using digital media. Students will practice responsible, legal, safe and ethical use of resources and technology. Students will be encouraged to use literature for learning personal growth and enjoyment.

Library Media

Unit One - Research and Information Fluency

Subject: Library Media

Grade/Course: Grade 6

Pacing: Once a week for four weeks

Unit of Study: Research and Information Fluency

Unit Overview: Students will learn to locate, access, evaluate, synthesize and use information in the Media Center effectively and efficiently to conduct research, solve problems and manage projects throughout all content areas.

Priority Standards:

Students will define an information need and plan a course of action to solve a problem or conduct research.

Students will use informational strategies to search for sources to meet an information need.

Students will use appropriate technologies to create written, visual, oral and multimedia to present research findings.

Students will assess the effectiveness of their information choices for problem-solving and conducting research.

“Unwrapped” Standards	
Concepts (What Students Need to Know)	Skills (What Students Need to Be Able to Do)
strategies information sources social, cultural issues (relating to media and technology)	use (DOK1) identify (DOK1) locate (DOK1) access (DOK1) understand (DOK1)

online safety	practice (DOK1)
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Essential Understanding

Information must be evaluated and processed to determine accuracy, relevance, and validity.

Essential Questions	Big ideas
<p>What skills and strategies are needed to gather information effectively, solve problems, and conduct research?</p> <p>Why and how do I evaluate information for accuracy, relevance, and validity?</p> <p>How can I express and effectively communicate ideas?</p>	<p>The appropriate choice of information and media allows us to communicate effectively. Questions guide research.</p> <p>Information must be evaluated and processed to determine accuracy, relevance, and validity.</p>

Assessments		
Common Formative Pre-Assessments	Progress Monitoring Checks – “Dipsticks”	Common Formative Mid and or Post-Assessments
<p>The minute paper- in one minute describe the most meaningful concepts you have learned thus far.</p> <p>Utilizing the website Quizlet have students create a quiz based on key concepts they are learning.</p> <p>List Six strategies to gather information effectively?</p> <p>List 6 available resources in the Media Center? Be specific.</p>	<p>Create an Ad with visuals and text describing the newly learned concept.</p> <p>Utilizing the Simitator website, students create a “Twitter” post and define a key concept in 140 characters.</p> <p>Utilizing the Chromebooks, students will create a two column table. Use the left column to write 5-8 important pieces of information and the right column</p>	<p>Using Easy Podcast students will play the role of content expert and create a podcast discussing content related issues.</p> <p>Students create a top ten list and describe the most important concepts in a humorous way.</p> <p>What five strategies would you use to gather information effectively and explain why?</p> <p>What are some available resources? Be specific.</p>

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Performance Task

To be developed during the course of the school year by the Media Specialist and Technology Teacher.

Engaging Learning Experiences

To be developed during the course of the school year.

Instructional Resources
Noodletools http://www.noodletools.com/debbie/literacies/information/5locate/adviceengine.html
NETS/ISTE Research and Information Fluency http://nets-implementation.iste.wikispaces.net/Research+and+Information+Fluency
American Association of School Librarians Standards for the 21st Century Learner http://www.ala.org/aasl/sites/ala.org.aasl/files/content/guidelinesandstandards/learningstandards/AASL_Learning_Standards_2007.pdf
Media center books and periodicals

Instructional Strategies	Meeting the Needs of All Students
Oral and written communication	Small group instruction Supplementary materials
Accessing and analyzing information	Assistive Technology Graphic Organizers
Collaboration	Differentiated Instruction
Presentation	Differentiate: content process product
Teamwork	Base on Student: readiness interests learning profile
Cooperative learning	
<u>21st Century Skills</u>	
Critical thinking and problem solving	Through: multiple intelligences
Collaboration and leadership	jigsaw
Agility and adaptability	graphic organizers
Initiative and entrepreneurialism	supplementary materials
Effective oral and written communication	
Accessing and analyzing information	
Curiosity and imagination	

<p><u>Marzano's Nine Instructional Strategies for Effective Teaching and Learning</u></p> <p>1. Identifying Similarities and Differences: helps students understand more complex problems by analyzing them in a simpler way</p> <p>2. Summarizing and Note-taking: promotes comprehension because students have to analyze what is important and what is not important and put it in their own words</p> <p>3. Reinforcing Effort and Providing Recognition: showing the connection between effort and achievement helps students helps them see the importance of effort and allows them to change their beliefs to emphasize it more. Note that recognition is more effective if it is contingent on achieving some specified standard.</p> <p>4. Homework and Practice: provides opportunities to extend learning outside the classroom, but should be assigned based on relevant grade level. All homework should have a purpose and that purpose should be readily evident to the students. Additionally, feedback should be given for all homework assignments.</p> <p>5. Nonlinguistic Representations: has recently been proven to stimulate and increase brain activity.</p> <p>6. Cooperative Learning: has been proven to have a positive impact on overall learning. Note: groups should be small enough to be effective and the strategy should be used in a systematic and consistent manner.</p> <p>7. Setting Objectives and Providing Feedback: provide students with a direction. Objectives should not be too specific and should be adaptable to students' individual objectives. There is no such thing as too much positive feedback, however, the method in which you give that feedback should be varied.</p> <p>8. Generating and Testing Hypotheses: it's not just for science class! Research shows that a deductive approach works best, but both inductive and deductive reasoning can help students understand and relate to the material.</p> <p>9. Cues, Questions, and Advanced Organizers: helps students use what they already know to enhance what they are about to learn. These</p>	<p>small group instruction varied questioning strategies additional time reteaching manipulatives mentor/tutor pre-teaching</p> <ul style="list-style-type: none"> ● use of visuals and realia ongoing comprehension checks co-teaching build on prior knowledge
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are usually most effective when used before a specific lesson.		
New Vocabulary	Students Achieving Below Standard	Students Achieving Above Standard
<p>Authentication</p> <p>Availability</p> <p>Bibliography</p> <p>Boolean operators</p> <p>Citation</p> <p>Copyright</p> <p>Creative Commons</p> <p>Databases</p> <p>Electronic Resources</p> <p>Evaluation</p> <p>Fair Use</p> <p>Information</p> <p>Intellectual Property</p> <p>Key Phrase</p> <p>Keywords</p> <p>Local Media</p> <p>Mass Media</p> <p>Media</p> <p>Media Literacy</p> <p>MLA format</p> <p>Plagiarism</p> <p>Primary source</p> <p>Print materials</p> <p>Product</p> <p>Public Domain</p> <p>Quotation</p> <p>Research</p> <p>Resources</p> <p>Search Engine</p> <p>Secondary Source</p> <p>Sources</p> <p>Subject Heading</p> <p>Summarizing</p> <p>Task</p> <p>Topic</p> <p>Trunkation</p>	<p>Reteach</p> <p>Small group instruction</p> <p>Assign a peer mentor</p> <p>The following provides a bank of suggestions within the Universal Design for Learning framework for accommodating students who are below grade level in your class. Variations on these accommodations are elaborated within lessons, demonstrating how and when they might be used.</p> <p><u>Provide Multiple Means of Representation</u></p> <ul style="list-style-type: none"> ● Guide students as they select and practice using their own graphic organizers and models to solve. ● Use direct instruction for vocabulary with visual or concrete representations. ● Use explicit directions with steps and procedures enumerated. ● Guide students through initial practice promoting gradual independence. “I do, we do, you do.” 	<p>Serve as a peer mentor</p> <p>Create a website</p> <p>The following chart provides a bank of suggestions within the Universal Design for Learning framework for accommodating students who are above grade level in your class. Variations on these accommodations are elaborated within lessons, demonstrating how and when they might be used. Provide</p> <p>Multiple Means of Representation Teach students how to ask questions (such as, “Do you agree?” and “Why do you think so?”) to extend “think-pair-share” conversations. Model and post conversation “starters,” such as: “I agree because...” “Can you explain how you solved it?” “I noticed that...” “Your solution is different from/ the same as mine because...” “My mistake was to...” Incorporate written reflection, evaluation, and synthesis. Allow creativity in expression and modeling solutions. Provide Multiple Means of Action and Expression Encourage students to explain their reasoning both orally and in writing. Offer choices of independent or group assignments for early finishers.</p>

	<ul style="list-style-type: none"> ● Use alternative methods of delivery of instruction such as recordings and videos that can be accessed independently or repeated if necessary. ● Scaffold complex concepts and provide leveled problems for multiple entry points. <p><u>Provide Multiple Means of Action and Expression</u></p> <ul style="list-style-type: none"> ● Have students restate their learning for the day. Ask for a different representation in the restatement. 'Would you restate that answer in a different way or show me by using a diagram?' ● Encourage students to explain their thinking and strategy for the solution. ● Choose tasks that are "just right" for learners but teach the same concepts. <p><u>Provide Multiple Means of Engagement</u></p> <ul style="list-style-type: none"> ● Clearly model steps, procedures, and questions to ask when solving. ● Cultivate peer-assisted learning interventions for instruction (e.g., dictation) and practice (e.g., peer modeling). 	<p>Have students share their observations in discussion and writing (e.g., journaling). Facilitate research and exploration through discussion, experiments, internet searches, trips, etc. Let students choose their mode of response: written, oral, concrete, pictorial, or abstract. Increase the pace. Adjust difficulty level by increasing the number of steps (e.g., change a one-step problem to a two-step problem). Provide Multiple Means of Engagement Push student comprehension into higher levels of Bloom's Taxonomy with questions such as: "What would happen if...?" "Can you propose an alternative...?" "How would you evaluate...?" "What choice would you have made...?" Ask "Why?" and "What if?" questions. Accept and elicit student ideas and suggestions for ways to extend games. Cultivate student persistence in problem-solving and do not neglect their need for guidance and support.</p>
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	<ul style="list-style-type: none">● Have students work together and then check their solutions.● Teach students to ask themselves questions: Do I know the meaning of all the words?; What is being asked?; Do I have all of the information I need?; What do I do first?● Practice routine to ensure smooth transitions.● Set goals with the students regarding next steps and what to focus on next	
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Library Media

Unit Two: Digital Citizenship

Subject: Library Media

Grade/Course: Grade 6

Pacing: Once a week for four weeks

Unit of Study: Internet Use and Digital Citizenship

Unit Overview: Students will utilize available information sources correctly and safely. Students will show good digital citizenship while using online resources and will be able to access appropriate information.

Priority Standards:

Students will use organizational strategies to identify, locate and access a variety of information.

Students will use informational strategies to search for sources to meet an information need.

Students will demonstrate responsible, legal and ethical use of information resources, computers and other technologies.

ISTE: 1a, 1b, 2a, 2b, 2d, 3a-d, 4a-c, 5a-d, 6a, 6b, 6d

“Unwrapped” Standards	
Concepts (What Students Need to Know)	Skills (What Students Need to Be Able to Do)
strategies variety of knowledge informational strategies information need social, cultural issues (relating to media and technology) online safety legal and ethical use of resources, computers and other technologies.	use (DOK1) identify (DOK1) locate (DOK1) access (DOK1) use (DOK1) search (DOK2) understand (DOK2) practice (DOK2) demonstrate (DOK2)

Essential Understandings

Digital Citizenship is navigating the digital world safely, responsibly, and ethically. There are rights and responsibilities associated with the use of information. Media Literacy is an integral skill to digital citizenship, critical thinking, informed decision-making and active participation in our society.

- Discuss and review the district wide Acceptable Use Policy.
- Discuss and review the district wide 1:1 Initiative.
- Discuss and review the following topics- Digital Etiquette, Digital Communication, Digital Citizenship, Literacy, Digital Security, Digital Rights and Responsibilities, Digital Access, Law and Commerce

Essential Questions	Big ideas
<p>What is Digital Citizenship and how will it assist me in my classes and in life?</p> <p>What are the ethics and responsibilities associated with the use of information?</p> <p>How is media literacy integral to digital citizenship?</p> <p>How do you utilize the Internet in an ethical and responsible manner?</p>	<p>Being a good Digital Citizen is an important part of being a good student.</p>

Assessments		
Common Formative Pre-Assessments	Progress Monitoring Checks – “Dipsticks”	Common Formative Mid and or Post-Assessments Resources
When using the Internet responsibly what six factors do you need to consider? Be specific.	<p>3,2,1- quick entrance and exit slips including the following information-</p> <p>3 things I learned</p> <p>2 Interesting facts</p> <p>1 thing I still need to know</p> <p>Students will have a set of red, yellow and green cards. They will set the red card on their desk if they need the teacher</p>	<p>Write three or more paragraphs explaining guidelines for utilizing the Internet and why they are important.</p> <p>Utilizing the website Quizlet and the key terms associated with Digital Citizenship students will create a quiz for the class.</p> <p>What does it means to be a good digital citizen? Create a presentation using Google</p>

	<p>to stop for help. Yellow if something is confusing. Green if they understand the information.</p>	<p>Slides and Include at least six characteristics.</p> <p>Podcast- Students will play the part of a content expert and discuss content-related issues on a podcast, using the free Easypodcast.</p>
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Performance Task
To be developed during the course of the school year by the Media Specialist and the Technology Teacher.
Engaging Learning Experiences
To be developed during the course of the school year.

Instructional Resources

Utilizing Google Classroom teachers will post assignments, receive student work, track missing work, and give feedback, all electronically. Teachers can upload and share Google files, other file types, or share links and can opt to automatically make a copy of a Google Document for each student. Work is organized automatically with Google folders for each assignment and for each student.

Utilizing the website Glossi have students create their own magazine on Utilizing the Internet or Digital Citizenship and then share with peers.

Utilizing the website Socrative, an excellent tool for creating online assessments, teachers will create an assessment and have students use either their cell phones and or laptops for gathering feedback from students. You can post as many questions as you like in a variety of formats. One of the more fun question formats is the "space race" format in which students can work individually or in teams to answer questions as quickly as possible. Socrative allows the teacher to engage and assess students as they are learning.

Digital Citizen Summit

<http://digcitsummit.com/>

Common Sense Media

<https://www.commonsensemedia.org/educators/digitalcitizenshipweek/school>

American Association of School Librarians Standards for the 21st Century Learner

http://www.ala.org/aasl/sites/ala.org.aasl/files/content/guidelinesandstandards/learningstandards/AASL_Learning_Standards_2007.pdf

Digital Citizenship

<http://digitalcitizenship.net>

Digital Citizenship Resources

<http://www.edutopia.org/article/digital-citizenship-resources>

Google Digital Literacy and Citizenship Curriculum:

<http://www.google.com/goodtoknow/web/curriculum/>

Instructional Strategies	Meeting the Needs of All Students
<p>21st Century Skills</p> <p>Critical thinking and problem solving Collaboration and leadership Agility and adaptability Initiative and entrepreneurialism Effective oral and written communication Accessing and analyzing information Curiosity and imagination</p> <p><u>Marzano's Nine Instructional Strategies for Effective Teaching and Learning</u></p> <p>1. Identifying Similarities and Differences: helps students understand more complex problems by analyzing them in a simpler way</p> <p>2. Summarizing and Note-taking: promotes comprehension because students have to analyze what is important and what is not important and put it in their own words</p> <p>3. Reinforcing Effort and Providing Recognition: showing the connection between effort and achievement helps students helps them see the importance of effort and allows them to change their beliefs to emphasize it more. Note that recognition is more effective if it is contingent on achieving some specified standard.</p> <p>4. Homework and Practice: provides opportunities to extend learning outside the classroom, but should be assigned based on relevant grade level. All homework should have a purpose and that purpose should be readily evident to the students. Additionally, feedback should be given for all homework assignments.</p> <p>5. Nonlinguistic Representations: has recently been proven to stimulate and increase brain activity.</p> <p>6. Cooperative Learning: has been proven to have a positive impact on overall learning. Note: groups should be small enough to be effective and the strategy should be used in a systematic and consistent manner.</p> <p>7. Setting Objectives and Providing Feedback: provide students with a direction. Objectives should not be too specific and should be</p>	<p>Differentiated Instruction</p> <p>Differentiate: content process product</p> <p>Base on Student: readiness interests learning profile</p> <p>Through: multiple intelligences jigsaw graphic organizers supplementary materials small group instruction varied questioning strategies additional time reteaching manipulatives mentor/tutor pre-teaching use of visuals and realia ongoing comprehension checks co-teaching build on prior knowledge</p>

<p>adaptable to students' individual objectives. There is no such thing as too much positive feedback, however, the method in which you give that feedback should be varied.</p> <p>8. Generating and Testing Hypotheses: it's not just for science class! Research shows that a deductive approach works best, but both inductive and deductive reasoning can help students understand and relate to the material.</p> <p>9. Cues, Questions, and Advanced Organizers: helps students use what they already know to enhance what they are about to learn. These are usually most effective when used before a specific lesson.</p>	
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New Vocabulary	Students Achieving Below Standard	Students Achieving Above Standard
Anti-Virus Applications Blog Browser Cloud Cloud Computing Cookie CPU Database Domain Flash-drive Identity Theft Intellectual Property Netiquette Phishing Social Network URL	<p>The following provides a bank of suggestions within the Universal Design for Learning framework for accommodating students who are below grade level in your class. Variations on these accommodations are elaborated within lessons, demonstrating how and when they might be used.</p> <p><u>Provide Multiple Means of Representation</u></p> <ul style="list-style-type: none"> ● Guide students as they select and practice using their own graphic organizers and models to solve. ● Use direct instruction for vocabulary with visual or concrete representations. ● Use explicit directions with steps and procedures enumerated. 	<p>The following chart provides a bank of suggestions within the Universal Design for Learning framework for accommodating students who are above grade level in your class. Variations on these accommodations are elaborated within lessons, demonstrating how and when they might be used. Provide</p> <p style="padding-left: 40px;">Multiple Means of Representation Teach students how to ask questions (such as, "Do you agree?" and "Why do you think so?") to extend "think-pair-share" conversations. Model and post conversation "starters," such as: "I agree because..." "Can you explain how you solved it?" "I noticed that..." "Your solution is different from/ the same as mine because..." "My mistake was to..." Incorporate written reflection, evaluation, and synthesis. Allow creativity in expression and modeling solutions. Provide</p> <p style="padding-left: 40px;">Multiple Means of Action and Expression Encourage</p>

	<ul style="list-style-type: none"> ● Guide students through initial practice promoting gradual independence. “I do, we do, you do.” ● Use alternative methods of delivery of instruction such as recordings and videos that can be accessed independently or repeated if necessary. ● Scaffold complex concepts and provide leveled problems for multiple entry points. <p><u>Provide Multiple Means of Action and Expression</u></p> <ul style="list-style-type: none"> ● Have students restate their learning for the day. Ask for a different representation in the restatement. ‘Would you restate that answer in a different way or show me by using a diagram?’ 	<p>students to explain their reasoning both orally and in writing. Offer choices of independent or group assignments for early finishers. Have students share their observations in discussion and writing (e.g., journaling). Facilitate research and exploration through discussion, experiments, internet searches, trips, etc. Let students choose their mode of response: written, oral, concrete, pictorial, or abstract. Increase the pace. Adjust difficulty level by increasing the number of steps (e.g., change a one-step problem to a two-step problem). Provide Multiple Means of Engagement Push student comprehension into higher levels of Bloom’s Taxonomy with questions such as: “What would happen if...?” “Can you propose an alternative...?” “How would you evaluate...?” “What choice would you have made...?” Ask “Why?” and “What if?” questions. Accept and elicit student ideas and suggestions for ways to extend games. Cultivate student persistence in problem-solving and do not neglect their need for guidance and support.</p>
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Library Media

Unit Three: Communication and Innovation

Subject: Library Media

Grade/Course: Grade 6

Pacing: In collaboration with classroom teacher

Unit of Study: Communication and Innovation

Unit Overview: Students will create a media presentation after gathering information online.

Priority Standards:

Students interpret, evaluate, communicate, and work collaboratively to create innovative products using digital and visual media.

Students use digital media to interact with others, work collaboratively and demonstrate global awareness.

Students will demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technologies.

“Unwrapped” Standards	
Concepts (What Students Need to Know)	Skills (What Students Need to Be Able to Do)

information	synthesize and use (DOK1)
appropriate technologies	use (DOK1)
visual, oral and multimedia to present research findings	create (DOK4)
research findings	present (DOK3)
creative thinking	demonstrate (DOK4)
knowledge	construct (DOK3)
products and processes using technologies	develop (DOK4)
using digital and visual media	interpret (DOK2)
using digital and visual media	evaluate (DOK2), communicate (DOK2)

Essential Understanding

In a world of media, it is important to be a critical user in order to understand the impact of both incoming and outgoing messages.

Essential Questions	Big ideas

<p>How does the appropriate choice of media allow for more effective communication?</p> <p>What are student responsibilities regarding the use of information and information technology?</p>	<p>Reflection and evaluation are essential skills for communicating and innovating.</p>
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Assessments		
Common Formative Pre-Assessments	Progress Monitoring Checks – “Dipsticks”	Common Formative Mid and or Post-Assessments
<p>Create a list of 5 things you want to learn.</p> <p>Utilizing their Chromebooks Students create a chart: What do I know? What do I need to</p>	<p>Entrance and Exit Slips</p> <p>Simile- What we learned today was like _____?</p>	<p>Create a list of three “tips” that were most useful in creating your presentation.</p> <p>Reflecto on your finished project. What did you learn about new sources, new tools,</p>

learn? What do I need to do to get there?		and creative ways to present your information.
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Performance Task

Past, Present, and the Future of Technology: Technology has transformed the classroom and the students lives. Technology has transformed faster than what is commonly known as Moore's Law: "Moore's law" is the observation that, over the history of computing hardware, the number of transistors in a dense integrated circuit has doubled approximately every two years. What does that mean for today's students and can you predict the future of technology?

Engaging Learning Experiences

Utilizing the Internet, students will construct a timeline listing historical aspects of computing- from the Eniac computer to the iMac air and beyond.

Task 1: Students should select the appropriate software to complete the task.

Task 2: Students create a timeline describing early and modern methods of computing and identify people involved in computing. For example- Bill Gates, Steve Jobs, Steve Wozniak.

Task 3: Students compare and contrast generations of computers and project future technology trends.

Task 4: Students will create a multimedia project and share results with the class.

Instructional Resources
Recording/Podcasting: Create original poems, folktale, book review or other writing and record recitation using photos, music and images.
Multimedia Presentation: Use multimedia program to create a presentation on a research project.
Use data to explore a global issue: Use real-time data to identify trends and forecast possibilities (ex: migration, climate change, ocean temperature changes.)
Idea Webbing: Use graphic organizer program to brainstorm a topic, synthesize and organize a thesis.
Interactive Models: Participate in virtual simulations, manipulate a system and use the information to predict a conclusion.
Comic Life – Storyboard and integrate digital images, text, drawings, video to relate a historical event, personal or family story, science issue, or online story.
Interactive Models: Manipulate electrical circuit variables and predict outcomes, create the elements of a system using the Interactive Whiteboard (Smartboard).
Meograph- a multimedia storytelling tool, allows users to pull video and photos from the web, from social media, cloud-based storage, the computer's hard drive or webcam. Easily add narration and music then embed or share. Students can use Meograph to collect and share family histories or cultural stories.
Utilizing Google Earth and augmented reality students can travel around the globe! Some examples include but are not limited to- study space through virtual space tour, the Jason Project. The Smithsonian, UPM Forest Life, Electronic Field Trip- History.org Colonial Williamsburg. See Appendix
Google Connected Classrooms. Google Communities is an excellent resource for teachers https://plus.google.com/communities/100662407427957932931/stream/1af408a0-3418-4b1e-a5b2-31c0ddc60976
Interactive Models: Manipulate electrical circuit variables and predict outcomes, create the elements of a system using the Interactive Whiteboard (Smartboard).
Internet Resources: NETS/ISTE Creativity and Innovation http://nets-implementation.iste.wikispaces.net/Creativity+and+Innovation ICONN

<http://www.iconn.org>

American Association of School Librarians Standards for the 21st Century Learner

http://www.ala.org/aasl/sites/ala.org.aasl/files/content/guidelinesandstandards/learningstandards/AASL_Learning_Standards_2007.pdf

Additional Resources:

THS Follett (Books and Periodicals)

Instructional Strategies	Meeting the Needs of All Students
<p>Oral and written communication Accessing and analyzing information Collaboration Presentation Teamwork Cooperative learning</p> <p><u>Marzano's Nine Instructional Strategies for Effective Teaching and Learning</u></p> <p>1. Identifying Similarities and Differences: helps students understand more complex problems by analyzing them in a simpler way</p> <p>2. Summarizing and Note-taking: promotes comprehension because students have to analyze what is important and what is not important and put it in their own words</p> <p>3. Reinforcing Effort and Providing Recognition: showing the connection between effort and achievement helps students helps them see the importance of effort and allows them to change their beliefs to emphasize it more. Note that recognition is more effective if it is contingent on achieving some specified standard.</p> <p>4. Homework and Practice: provides opportunities to extend learning outside the classroom, but should be assigned based on relevant grade level. All homework should have a purpose and that purpose should be readily evident to the students. Additionally, feedback should be given for all homework assignments.</p> <p>5. Nonlinguistic Representations: has recently been proven to stimulate and increase brain activity.</p>	<p>Small group instruction Supplementary materials Assistive Technology Graphic Organizers</p> <p>Differentiated Instruction</p> <p>Differentiate: content process product</p> <p>Base on Student: readiness interests learning profile</p> <p>Through: multiple intelligences jigsaw graphic organizers supplementary materials small group instruction varied questioning strategies additional time reteaching manipulatives mentor/tutor pre-teaching use of visuals and realia ongoing comprehension checks co-teaching build on prior knowledge</p>

6. Cooperative Learning: has been proven to have a positive impact on overall learning. Note: groups should be small enough to be effective and the strategy should be used in a systematic and consistent manner.

7. Setting Objectives and Providing Feedback: provide students with a direction. Objectives should not be too specific and should be adaptable to students' individual objectives. There is no such thing as too much positive feedback, however, the method in which you give that feedback should be varied.

8. Generating and Testing Hypotheses: it's not just for science class! Research shows that a deductive approach works best, but both inductive and deductive reasoning can help students understand and relate to the material.

9. Cues, Questions, and Advanced Organizers: helps students use what they already know to enhance what they are about to learn. These are usually most effective when used before a specific lesson.

New Vocabulary	Students Achieving Below Standard	
New Vocabulary	Students Achieving Below Standard	Students Achieving Above Standard
Analytical Communicate Collaborate Collaborative Creative Thinking Critical Thinking Deadline Enhance Evaluate Forecasting Implement Implementation Interpret Innovation Interpersonal Leadership Motivation Optimize Problem Solving Productivity Technology Literacy Trends	<p>The following provides a bank of suggestions within the Universal Design for Learning framework for accommodating students who are below grade level in your class. Variations on these accommodations are elaborated within lessons, demonstrating how and when they might be used.</p> <p><u>Provide Multiple Means of Representation</u></p> <ul style="list-style-type: none"> ● Guide students as they select and practice using their own graphic organizers and models to solve. ● Use direct instruction for vocabulary with visual or concrete representations. ● Use explicit directions with steps and procedures enumerated. ● Guide students through initial practice promoting gradual independence. “I do, we do, you do.” ● Use alternative methods of delivery of instruction such as recordings and videos that can be accessed independently or repeated if necessary. 	<p>Serve as a peer mentor Create a website</p> <p>The following chart provides a bank of suggestions within the Universal Design for Learning framework for accommodating students who are above grade level in your class. Variations on these accommodations are elaborated within lessons, demonstrating how and when they might be used. Provide Multiple Means of Representation Teach students how to ask questions (such as, “Do you agree?” and “Why do you think so?”) to extend “think-pair-share” conversations. Model and post conversation “starters,” such as: “I agree because...” “Can you explain how you solved it?” “I noticed that...” “Your solution is different from/ the same as mine because...” “My mistake was to...” Incorporate written reflection, evaluation, and synthesis. Allow creativity in expression and modeling solutions. Provide Multiple Means of Action and Expression Encourage students to explain their reasoning both orally and in writing. Offer choices of independent or group assignments for early finishers. Have students share their observations in discussion and writing (e.g., journaling). Facilitate research and</p>

	<ul style="list-style-type: none"> ● Scaffold complex concepts and provide leveled problems for multiple entry points. <p><u>Provide Multiple Means of Action and Expression</u></p> <ul style="list-style-type: none"> ● Have students restate their learning for the day. Ask for a different representation in the restatement. 'Would you restate that answer in a different way or show me by using a diagram?' ● Encourage students to explain their thinking and strategy for the solution. ● Choose tasks that are "just right" for learners but teach the same concepts. <p><u>Provide Multiple Means of Engagement</u></p> <ul style="list-style-type: none"> ● Clearly model steps, procedures, and questions to ask when solving. ● Cultivate peer-assisted learning interventions for instruction (e.g., dictation) and practice (e.g., peer modeling). ● Have students work together and then check their solutions. ● Teach students to ask themselves questions: Do I know the meaning of all 	<p>exploration through discussion, experiments, internet searches, trips, etc. Let students choose their mode of response: written, oral, concrete, pictorial, or abstract. Increase the pace. Adjust difficulty level by increasing the number of steps (e.g., change a one-step problem to a two-step problem). Provide Multiple Means of Engagement. Push student comprehension into higher levels of Bloom's Taxonomy with questions such as: "What would happen if...?" "Can you propose an alternative...?" "How would you evaluate...?" "What choice would you have made...?" Ask "Why?" and "What if?" questions. Accept and elicit student ideas and suggestions for ways to extend games. Cultivate student persistence in problem-solving and do not neglect their need for guidance and support.</p>
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	<p>the words?; What is being asked?; Do I have all of the information I need?; What do I do first?</p> <ul style="list-style-type: none"> ● Practice routine to ensure smooth transitions. ● Set goals with the students regarding next steps and what to focus on next. 	
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Technology and Library Media

Unit Four: Technology Operations and Concepts

Subject: Technology and Library Media

Grade/Course: Grade 6

Pacing: Twice per week 2 throughout the semester.

Unit of Study: Technology Operations and Concepts

Unit Overview: Students will demonstrate a foundation of technology concepts, systems and operations and use computers and other technologies for productivity, problem solving, and learning across all content areas.

Priority Standards:

Students will demonstrate proficiency in the use of computers and applications including sound understanding of technology concepts, systems and operations.

“Unwrapped” Standards	
Concepts (What Students Need to Know)	Skills (What Students Need to Be Able to Do)

appreciation and self-motivation	develop (DOK2)
appropriate materials	determine (DOK1)
appropriate materials	select (DOK1)

Essential Questions	Big ideas
<p>How can I use technology to be productive and solve problems?</p> <p>How will technology transforms the learning environment?</p>	Effective use of technology enables us to live, learn and work.

Essential Understandings
Effective use of technology enables us to live, learn and work.

Assessments		
Common Formative Pre-Assessments	Progress Monitoring Checks – “Dipsticks”	Common Formative Mid and or Post-Assessments Resources
<p>Utilizing the sticky note app on the Chromebooks students will create sticky notes outlining key concepts.</p> <p>Muddy Moment- what frustrates and confuses you and why?</p>	<p>3-2-1 Three things you found out, 2 interesting things, 1 you still need to find out.</p>	<p>Utilizing FlipQuiz students create their own gameshow style boards with FlipQuiz. Excellent tool for test preparation, assessment or gauging knowledge. students engaged with this game style learning tool. Students can create a research and technology quiz.</p>

Performance Task
To be developed during the course of the school year by the Media Specialist and Technology Teacher.
Engaging Learning Experiences
To be developed during the course of the year.

Instructional Resources
Utilizing the Chromebooks and Haiku Deck, students create image-rich slideshows in a fraction of the time required by most presentation software. Easily import photos from Google Drive, Facebook, and other popular sites, or tap into millions of free Creative Commons images through the app's unique built-in keyword image search. Sizing, formatting, and attribution are all handled seamlessly, leaving you plenty of time to focus on your message.
Utilizing the website Newsela-Explore a library of high-quality, engaging nonfiction articles as well as assessments. Newsela's constantly expanding archive helps students develop a love of reading while they expand their understanding of the world.

American Association of School Librarians Standards for the 21st Century Learner

http://www.ala.org/aasl/sites/ala.org.aasl/files/content/guidelinesandstandards/learningstandards/AASL_Learning_Standards_2007.pdf

Instructional Strategies	Meeting the Needs of All Students
<u>21st Century Skills</u> Critical thinking and problem solving Collaboration and leadership Agility and adaptability Initiative and entrepreneurialism Effective oral and written communication Accessing and analyzing information Curiosity and imagination	Differentiated Instruction Differentiate: content process product Base on Student: readiness interests learning profile
<u>Marzano's Nine Instructional Strategies for Effective Teaching and Learning</u> 1. Identifying Similarities and Differences: helps students understand more complex problems by analyzing them in a simpler way 2. Summarizing and Note-taking: promotes comprehension because students have to analyze what is important and what is not important and put it in their own words 3. Reinforcing Effort and Providing Recognition: showing the connection between	Through: multiple intelligences jigsaw graphic organizers supplementary materials small group instruction varied questioning strategies additional time reteaching

<p>effort and achievement helps students helps them see the importance of effort and allows them to change their beliefs to emphasize it more. Note that recognition is more effective if it is contingent on achieving some specified standard.</p> <p>4. Homework and Practice: provides opportunities to extend learning outside the classroom, but should be assigned based on relevant grade level. All homework should have a purpose and that purpose should be readily evident to the students. Additionally, feedback should be given for all homework assignments.</p> <p>5. Nonlinguistic Representations: has recently been proven to stimulate and increase brain activity.</p> <p>6. Cooperative Learning: has been proven to have a positive impact on overall learning. Note: groups should be small enough to be effective and the strategy should be used in a systematic and consistent manner.</p> <p>7. Setting Objectives and Providing Feedback: provide students with a direction. Objectives should not be too specific and should be adaptable to students' individual objectives. There is no such thing as too much positive feedback, however, the method in which you give that feedback should be varied.</p> <p>8. Generating and Testing Hypotheses: it's not just for science class! Research shows that a deductive approach works best, but both inductive and deductive reasoning can help students understand and relate to the material.</p> <p>9. Cues, Questions, and Advanced Organizers: helps students use what they already know to enhance what they are about to learn. These are usually most effective when used before a specific lesson.</p>	<p>manipulatives mentor/tutor pre-teaching use of visuals and realia ongoing comprehension checks co-teaching build on prior knowledge</p>
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New Vocabulary	Students Achieving Below Standard	Students Achieving Above Standard
Avatar Blog Copyright Creative Commons CPU Desktop Publishing Digital Commerce Download Emoticon File Sharing Folders Graphics Graphic Frame Grouping Icon Identity theft Intellectual Property Input Device Layout Guide Maximize Privacy Upload URL	<p>The following provides a bank of suggestions within the Universal Design for Learning framework for accommodating students who are below grade level in your class. Variations on these accommodations are elaborated within lessons, demonstrating how and when they might be used.</p> <p><u>Provide Multiple Means of Representation</u></p> <ul style="list-style-type: none"> ● Guide students as they select and practice using their own graphic organizers and models to solve. ● Use direct instruction for vocabulary with visual or concrete representations. ● Use explicit directions with steps and procedures enumerated. ● Guide students through initial practice promoting gradual independence. “I do, we do, you do.” ● Use alternative methods of delivery of instruction such as recordings and videos that can be accessed independently or repeated if necessary. ● Scaffold complex concepts and provide leveled problems for multiple entry points. 	<p>The following chart provides a bank of suggestions within the Universal Design for Learning framework for accommodating students who are above grade level in your class. Variations on these accommodations are elaborated within lessons, demonstrating how and when they might be used. Provide</p> <p>Multiple Means of Representation Teach students how to ask questions (such as, “Do you agree?” and “Why do you think so?”) to extend “think-pair-share” conversations. Model and post conversation “starters,” such as: “I agree because...” “Can you explain how you solved it?” “I noticed that...” “Your solution is different from/ the same as mine because...” “My mistake was to...” Incorporate written reflection, evaluation, and synthesis. Allow creativity in expression and modeling solutions. Provide Multiple Means of Action and Expression Encourage students to explain their reasoning both orally and in writing. Offer choices of independent or group assignments for early finishers. Have students share their observations in discussion and writing (e.g., journaling). Facilitate research and exploration through discussion, experiments, internet searches, trips, etc. Let students choose their mode of response: written, oral, concrete, pictorial, or</p>

	<p><u>Provide Multiple Means of Action and Expression</u></p> <ul style="list-style-type: none"> ● Have students restate their learning for the day. Ask for a different representation in the restatement. 'Would you restate that answer in a different way or show me by using a diagram?' ● Encourage students to explain their thinking and strategy for the solution. ● Choose tasks that are "just right" for learners but teach the same concepts. <p><u>Provide Multiple Means of Engagement</u></p> <ul style="list-style-type: none"> ● Clearly model steps, procedures, and questions to ask when solving. ● Cultivate peer-assisted learning interventions for instruction (e.g., dictation) and practice (e.g., peer modeling). ● Have students work together and then check their solutions. ● Teach students to ask themselves questions: Do I know the meaning of all the words?; What is being asked?; Do I have all of the information I need?; What do I do first? 	<p>abstract. Increase the pace. Adjust difficulty level by increasing the number of steps (e.g., change a one-step problem to a two-step problem). Provide Multiple Means of Engagement Push student comprehension into higher levels of Bloom's Taxonomy with questions such as: "What would happen if...?" "Can you propose an alternative...?" "How would you evaluate...?" "What choice would you have made...?" Ask "Why?" and "What if?" questions. Accept and elicit student ideas and suggestions for ways to extend games. Cultivate student persistence in problem-solving and do not neglect their need for guidance and support.</p>
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	<ul style="list-style-type: none"> ● Practice routine to ensure smooth transitions. ● Set goals with the students regarding next steps and what to focus on next. 	
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Library Media

Unit Five: Literature Appreciation

Subject: Library Media

Grade/Course: Grade 6

Pacing: School Year

Unit of Study: Literature Appreciation

Unit Overview: Students will choose appropriate literature for pleasure reading and will develop an appreciation for literature.

Priority Standards:

Develop a valuable skill for lifelong learning in all subject areas.

Develop an ability to read and comprehend complex literary and informational texts independently and proficiently.

Demonstrate self-motivation as a reader.

“Unwrapped” Standards	
Concepts (What Students Need to Know)	Skills (What Students Need to Be Able to Do)

appreciation and self-motivation	develop (DOK2)
appropriate materials	determine (DOK1)
appropriate materials	select (DOK1)

Essential Understandings
Literature will give students insight into other cultures, customs, religions, politics, historical and social issues.

Essential Questions	Big ideas
<p>How can reading and discussing texts help to clarify values and define the most important human qualities?</p> <p>How will reading allow one to analyze, gain insight and make inferences through text?</p>	Reading allows us to experience the world.

Assessments		
Common Formative Pre-Assessments	Progress Monitoring Checks – “Dipsticks”	Common Formative Mid and or Post-Assessments Resources
Did you know? Share 10 interesting facts about the selected reading with the students prior to the assigned reading.	Entrance and Exit Slips 3,2,1- List three things you have learned, two interesting things and 1 you still need to know. I believe that _____ because_____. I am confused by_____.	List 10 key words from the text Do a free verse poem from the text. Write a summary of the reading based on the highlighted words. Survey students to gauge perceptions and feelings about reading and how they have changed during the year. Share your favorite book, poem or character with the class.

Performance Task
To be developed during the course of the school year.
Engaging Learning Experiences
To be developed during the course of the year.

Instructional Resources

Ideas:

Utilizing the app Figment which is a community of readers and writers, creators and artists, using the internet to share ideas and stories. In Figment, one can search for particular types of texts/writing, by genre or by tags. Check out Figment's library or spotlight books, or join a group based on interests. There are forums for networking, sharing ideas and opinions, and troubleshooting. Keep up to date on the Daily Fig for contests, polls, and quizzes. Get feedback and share your talents! You can use Figment for a summer reading group.

Have students participate in a read-aloud, storytelling, booktalking, silent and voluntary reading experiences.

Create literature circles, and encourage students to participate with strong discussion and ownership over reading. Allow choice into the literature circles by providing them with a few novel choices and a blank calendar to plan out their reading.

Utilize Graphic novels to help struggling readers. Have students illustrate selected texts to reinforce understanding.

Have students participate at the same time in a “Tabletop Twitter” excercise. Spread out butcher paper and put short passages from a book, a question, or information about a topic in the middle. Students then respond by writing on the paper and writing responses to other students’ contributions. Limit responses to 140 character.

Internet Resources:

American Association of School Librarians Standards for the 21st Century Learner

http://www.ala.org/aasl/sites/ala.org.aasl/files/content/guidelinesandstandards/learningstandards/AASL_Learning_Standards_2007.pdf

We are teachers.

<http://www.weareteachers.com/>

6th grade research, reading and writing.

<https://learnzillion.com/resources/72225-6th-grade-research-reading-and-writing-using-resources-to-craft-an-informational-text>

Vocabulary

www.vocabulary.com

Genre Quizlet

<https://quizlet.com/3576776/literary-genres-flash-cards/>

Symbaloo

<http://edu.symbaloo.com/mix/researchtechtools>

Instructional Strategies	Meeting the Needs of All Students
<p><u>21st Century Skills</u></p> <p>Critical thinking and problem solving Collaboration and leadership Agility and adaptability Initiative and entrepreneurialism Effective oral and written communication Accessing and analyzing information Curiosity and imagination</p> <p><u>Marzano's Nine Instructional Strategies for Effective Teaching and Learning</u></p> <p>1. Identifying Similarities and Differences: helps students understand more complex problems by analyzing them in a simpler way</p> <p>2. Summarizing and Note-taking: promotes comprehension because students have to analyze what is important and what is not important and put it in their own words</p> <p>3. Reinforcing Effort and Providing Recognition: showing the connection between effort and achievement helps students helps them see the importance of effort and allows them to change their beliefs to emphasize it more. Note that recognition is more effective if it is contingent on achieving some specified standard.</p> <p>4. Homework and Practice: provides opportunities to extend learning outside the classroom, but should be assigned based on relevant grade level. All homework should have a purpose and that purpose should be readily evident to the students. Additionally, feedback should be given for all homework assignments.</p> <p>5. Nonlinguistic Representations: has recently been proven to stimulate and increase brain activity.</p> <p>6. Cooperative Learning: has been proven to have a positive impact on overall learning. Note: groups should be small enough to be effective and the strategy should be used in a systematic and consistent manner.</p> <p>7. Setting Objectives and Providing Feedback: provide students with a direction. Objectives</p>	<p>Differentiated Instruction</p> <p>Differentiate: content process product</p> <p>Base on Student: readiness interests learning profile</p> <p>Through: multiple intelligences jigsaw graphic organizers supplementary materials small group instruction varied questioning strategies additional time reteaching manipulatives mentor/tutor pre-teaching use of visuals and realia ongoing comprehension checks co-teaching build on prior knowledge</p>

<p>should not be too specific and should be adaptable to students' individual objectives. There is no such thing as too much positive feedback, however, the method in which you give that feedback should be varied.</p> <p>8. Generating and Testing Hypotheses: it's not just for science class! Research shows that a deductive approach works best, but both inductive and deductive reasoning can help students understand and relate to the material.</p> <p>9. Cues, Questions, and Advanced Organizers: helps students use what they already know to enhance what they are about to learn. These are usually most effective when used before a specific lesson.</p>	
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New Vocabulary	Students Achieving Below Standard	Students Achieving Above Standard
Genre Fiction Non Fiction Autobiography Fable Tragedy Comedy Setting Character Point of View Climax Resolution Mood Theme Tone Foreshadow Flashback Irony Sensory Language Metaphor Simile Personification Idiom	<p>The following provides a bank of suggestions within the Universal Design for Learning framework for accommodating students who are below grade level in your class. Variations on these accommodations are elaborated within lessons, demonstrating how and when they might be used.</p> <p><u>Provide Multiple Means of Representation</u></p> <ul style="list-style-type: none"> ● Guide students as they select and practice using their own graphic organizers and models to solve. 	<p>The following chart provides a bank of suggestions within the Universal Design for Learning framework for accommodating students who are above grade level in your class. Variations on these accommodations are elaborated within lessons, demonstrating how and when they might be used. Provide</p> <p style="padding-left: 20px;">Multiple Means of Representation</p> <p>Teach students how to ask questions (such as, "Do you agree?" and "Why do you think so?") to extend "think-pair-share" conversations. Model and post conversation "starters," such as: "I agree because..." "Can you explain how you solved it?" "I noticed that..." "Your solution is different from/ the same as mine because..." "My mistake was to..." Incorporate</p>

	<ul style="list-style-type: none"> ● Use direct instruction for vocabulary with visual or concrete representations. ● Use explicit directions with steps and procedures enumerated. ● Guide students through initial practice promoting gradual independence. “I do, we do, you do.” ● Use alternative methods of delivery of instruction such as recordings and videos that can be accessed independently or repeated if necessary. ● Scaffold complex concepts and provide leveled problems for multiple entry points. <p><u>Provide Multiple Means of Action and Expression</u></p> <ul style="list-style-type: none"> ● Have students restate their learning for the day. Ask for a different representation in the restatement. ‘Would you restate that answer in a different way or show me by using a diagram?’ ● Encourage students to explain their thinking and strategy for the solution. ● Choose tasks that are “just right” for learners but teach the same concepts. 	<p>written reflection, evaluation, and synthesis. Allow creativity in expression and modeling solutions. Provide Multiple Means of Action and Expression Encourage students to explain their reasoning both orally and in writing. Offer choices of independent or group assignments for early finishers.</p> <p>Have students share their observations in discussion and writing (e.g., journaling). Facilitate research and exploration through discussion, experiments, internet searches, trips, etc. Let students choose their mode of response: written, oral, concrete, pictorial, or abstract. Increase the pace.</p> <p>Adjust difficulty level by increasing the number of steps (e.g., change a one-step problem to a two-step problem). Provide Multiple Means of Engagement Push student comprehension into higher levels of Bloom’s Taxonomy with questions such as: “What would happen if...?” “Can you propose an alternative...?” “How would you evaluate...?” “What choice would you have made...?” Ask “Why?” and “What if?” questions. Accept and elicit student ideas and suggestions for ways to extend games. Cultivate student persistence in problem-solving and do not neglect their need for guidance and support.</p>
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	<p><u>Provide Multiple Means of Engagement</u></p> <ul style="list-style-type: none">● Clearly model steps, procedures, and questions to ask when solving.● Cultivate peer-assisted learning interventions for instruction (e.g., dictation) and practice (e.g., peer modeling).● Have students work together and then check their solutions.● Teach students to ask themselves questions: Do I know the meaning of all the words?; What is being asked?; Do I have all of the information I need?; What do I do first?● Practice routine to ensure smooth transitions.<ul style="list-style-type: none">● Set goals with the students regarding next steps and what to focus on next.	
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Criteria For Evaluating Websites

1. AUTHORITY

Authority reveals that the person, institution or agency responsible for a site has the qualifications and knowledge to do so. Evaluating a web site for authority:

- Authorship: It should be clear who developed the site.
- Contact information should be clearly provided: email address, address, phone number.
- Credentials: the author should state qualifications, credentials, or personal background that gives them authority to present information.
- Check to see if the site supported by an organization or a commercial body

2. PURPOSE

The purpose of the information presented in the site should be clear. Some sites are meant to inform, persuade, state an opinion, entertain, or parody something or someone. Evaluating a web site for purpose:

- Does the content support the purpose of the site?
- Is the information geared to a specific audience (students, scholars, general reader)?
- Is the site organized and focused?
- Are the outside links appropriate for the site?
- Does the site evaluate the links?
- Check the domain of the site. The URL may indicate its purpose.

3. COVERAGE

It is difficult to assess the extent of coverage since depth in a site, through the use of links, can be infinite. One author may claim comprehensive coverage of a topic while another may cover just one aspect of a topic. Evaluating a web site for coverage:

- Does the site claim to be selective or comprehensive?
- Are the topics explored in depth?
- Compare the value of the site's information compared to other similar sites.
- Do the links go to outside sites rather than its own?
- Does the site provide information with no relevant outside links?

4. CURRENCY

Currency of the site refers to: 1) how current the information presented is, and 2) how often the site is updated or maintained. It is important to know when a site was created, when it was last updated, and if all of the links are current. Evaluating a web site for currency involves finding the date information was:

- first written
- placed on the web
- last revised

Then ask if:

- Links are up-to-date
- Links provided should be reliable. Dead links or references to sites that have moved are not useful.
- Information provided so trend related that its usefulness is limited to a certain time period?
- the site been under construction for some time?

5. OBJECTIVITY

Objectivity of the site should be clear. Beware of sites that contain bias or do not admit its bias freely. Objective sites present information with a minimum of bias. Evaluating a web site for objectivity:

- Is the information presented with a particular bias?
- Does the information try to sway the audience?
- Does site advertising conflict with the content?
- Is the site trying to explain, inform, persuade, or sell something?

6. ACCURACY

There are few standards to verify the accuracy of information on the web. It is the responsibility of the reader to assess the information presented. Evaluating a web site for accuracy:

- Reliability: Is the author affiliated with a known, respectable institution?
- References: do statistics and other factual information receive proper references as to their origin?

- Does the reading you have already done on the subject make the information seem accurate?
- Is the information comparable to other sites on the same topic?
- Does the text follow basic rules of grammar, spelling and composition?
- Is a bibliography or reference list included?

Presentation Rubric

	Exceeds Standard 5 pts	Meets Standard 3 pts	Below Standard 1 pts
Content	<p>Exceeds Standard</p> <p>The content of the presentation clearly answered the essential question. The information was logically and creatively organized.</p>	<p>Meets Standard</p> <p>The content of the presentation answered the essential question. The information was logically organized.</p>	<p>Below Standard</p> <p>The content of the presentation attempted to answer the essential question. All questions may not have been answered. The information was somewhat organized.</p>
Visual Presentation	<p>Exceeds Standard</p> <p>The multimedia tool used to present their information was well thought out and creative. The text was clearly legible, and the visuals thoroughly elaborated the key ideas. The font and background colors were visually appealing and thoughtfully chosen.</p>	<p>Meets Standard</p> <p>The multimedia tool used to present their information was appropriate. The text was legible, and the visuals elaborated the ideas appropriately. The font and background colors were visually appealing.</p>	<p>Below Standard</p> <p>The multimedia tool used to present their information was somewhat appropriate. The text was fairly legible, and the visuals attempted to connect to the key ideas. The font and background colors were not visually appealing.</p>
Oral Presentation	<p>Exceeds Standard</p> <p>Student spoke clearly and at an appropriate voice level. He/she made eye contact all of the time.</p>	<p>Meets Standard</p> <p>Student spoke clearly and at an appropriate voice level. He/she made eye contact most of the time.</p>	<p>Below Standard</p> <p>Student was difficult to understand. His/her voice level was too low to follow. He/she made little or no eye contact.</p>
Group Work	<p>Exceeds Standard</p> <p>The group worked together well. They helped each other and the work was shared equally. All members contributed.</p>	<p>Meets Standard</p> <p>The group worked together well. The work was shared equally, and all members contributed.</p>	<p>Below Standard</p> <p>The group did not work well together . The work was not shared equally, and one or more members did not contribute.</p>

Sample Lesson Plan

Become an Online Sleuth

DESCRIPTION:

In this class, students will identify guidelines for evaluating the credibility of content online. A Student Handout Booklet accompanies this class.

TIME REQUIRED: Approx. 50 minutes

PREREQUISITES: Students need to understand the difference between lies and truth, fact and opinion. They also need basic computer skills and experience searching topics online.

RECOMMENDED GRADE: 6-8

ESSENTIAL QUESTIONS:

Why is it important to be alert and check sources while exploring online?

LEARNING GOALS:

- Students will understand that just because information is online doesn't mean it's true.
- Students will learn the guidelines on what information they can and can't trust.
- Students will evaluate and compare online information sources for accuracy, relevance and bias.
- Students will apply their knowledge of reputable online sources to determine which sites are credible and which are not.

PREPARATION:

Materials needed:

Chart paper or chalk/white board

Student Handouts booklet for each student.

Materials recommended:

Computer with Internet connection and LCD projector device for presenter.

Chromebooks.

Optional video:

Detecting Lies and Staying True: <http://www.youtube.com/watch?v=fXFbQKz3anw>

VOCABULARY:

Accuracy the condition or quality of being true, correct, or exact; freedom from error or defect; precision or exactness; correctness

Bias a particular tendency or inclination, or prejudice

Credible worthy of belief or confidence; trustworthy

Credentials anything that provides the basis for confidence, belief, credit, etc

Domain

Extension

the suffix at the end of a web address, such as .com or .org.

Evaluate to judge or determine the significance, worth, or quality of

Publisher a person or company whose business is the publishing of books, newspapers, online articles, computer software, etc.

Relevance relation to the matter at hand

Skeptic a person who questions the validity or authenticity of something appearing to be factual

URL web address you type into a browser to reach a website

ISTE: 3:b: Students locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media. 3:c: Students evaluate and select information sources and digital tools based on the appropriateness to specific tasks.

Pass out the True or False Questions handout and have students mark a “T” or “F” after each statement

(Student Handout, 2)

True or False?

- If I can find it online, it must be true. (F)
- There is an email address listed in the website, so it must be a legitimate source! (F)
- There is a logo of the White House at the top of the page, so I can definitely trust this website. (F)
- The website looks really official. The information it offers must be true. (F)
- There are a lot of graphs and charts on the site. With all this information it must be true. (F)
- It is clear who wrote the content because there is contact information and the information seems current and error-free. I can safely use this information for my homework assignment. (F)
- I should always compare the information I find online with at least 2 other sources. (T)
- I should always be a skeptic when it comes to information that I find online. (T)
- I should always think about what's missing from a website. (T)
- I should always review the sources (or author) of the website. (T)

Choose one of these following activity ideas:

Movie ratings: Ask your students to think about their favorite movie and write it down. Ask them to get specific about why they thought it was good. What did you look for? Discuss with your neighbor.

Modified 2 Truths and 1 lie Game: Tell your students two truths and one lie. Ask them to guess which is the lie. Have them explain their thought-process and why they guessed the way they did.

Say: “We’re always evaluating what we see and hear. Sometimes we forget to do this with online resources.”

Ask, What makes a website trustworthy? Ask students to come up with a list of factors they think

makes a website trustworthy and have them share out with the class.

Lead a discussion on the topic, relying on these talking points:

- Anyone can write things on the web.
- Although many things on the web may be interesting and correct, we can't always be sure that everything is necessarily true.
- Not everyone is an expert on the subject on which they write.
- Since we don't always know who wrote the information or if they are qualified to write on the subject, we need to be alert and check information before we can trust it.

Pre-Assessment (2 min)

Hook or Attention Activity (3 min)

What makes a website trustworthy? (5 min)

Either watch this movie1 by Google, Detecting Lies and Staying True

(<http://www.youtube.com/watch?v=fXFbQKz3anw>) and ask them to list the evaluation criteria that are

presented in this video. Pass out "While You Watch" (Student Handouts, 3) to fill out as they watch the

video or right after.

Say: "You are going to watch a short video (developed by the team at Google) that will talk about guidelines on how to evaluate online resources. As you watch the video, please take note of the tips for trusting a website."

OR share these key concepts from the video with your class:

Say: "The Internet allows you to find any information that you want. However, just because it is online doesn't mean it's true. You must be a skeptic and ask: What is the point of view of this website? What are they trying to get me to believe? What opinions or ideas are missing? You should also investigate the source and ask: Who is publishing the information? Remember, a reliable source, like a university, tends to be more

credible. Lastly, follow the rule of three—this means compare three sources of information before coming to a conclusion.”

Ask the students to name the tips that they just heard. These should include:

- Be a skeptic.
- Don’t be fooled by cool or professional websites.
- Ask yourself what’s the point of view of the site.
- What are they trying to get me to believe?
- What opinions or ideas are missing?
- Investigate the source.
- Find out who published the information.
- Follow the “rule of 3”: compare 3 sources of information. Remember to include one source with an opposing viewpoint.
- Always check facts that you find.

Say: “This is great. You identified many guidelines for detecting trustworthy sources online. Let’s discuss some more specific criteria that can help us evaluate a website.”

1 NOTE: This video covers two concepts (detecting lies and staying true). This lesson, however, only focuses on the first concept,

Detecting Lies.

Guidelines to follow (10 min)

Additional Evaluation Criteria (10 min)

1) Discuss these possibilities with your students:

Investigate the source:

- Check the URL - what is the domain extension and what does it stand for? (student handout, 4):

Say: “Think of domain extension as a flag for a country. It helps group similar websites together. Some common domain extensions include .com and .org. For example, .com

represents the word “commercial” (businesses like this extension). Countries also have domain extensions, like .co.uk (which refers to the UK). When searching for something online, make sure to check the website’s domain extension to see if the website’s source makes sense for your search – in other words, if you’re looking for educational sites, maybe you should put more weight on websites with .edu.

- Is it clear who created the content?
- Can you tell what the qualifications of the author are?
- Is the content protected by copyrights?

Who holds the copyrights? Discuss the meaning of copyrights: When a person creates an original work that is fixed in a physical medium, he or she automatically owns copyright to the work. Copyright ownership gives the owner the exclusive right to use the work in certain, specific ways. Many types of works are eligible for copyright protection, including:

- Audiovisual works, such as TV shows, movies, and online videos
- Sound recordings and musical compositions
- Written works, such as lectures, articles, books, and musical compositions
- Visual works, such as paintings, posters, and advertisements
- Video games and computer software
- Dramatic works, such as plays and musicals

Ideas, facts, and processes are not subject to copyright. Names and titles are not, by themselves, subject

to copyright protection. For more information about Copyrights, visit:

- <http://www.youtube.com/yt/copyright/what-is-copyright.html>
- <http://www.teachingcopyright.org/curriculum/hs>

What are they trying to get me to believe: What is the purpose of the site? Why was it created? Is the purpose clear? Is it to sell something, to inform, to explain, to persuade, to entertain, to share, etc.?

What kind of a website is it? Is it a business website? Is it a personal website? Is it a news source?

What is the point of view of the site: What information is included? What information is missing from this website? What is the bias of the author? What ideas or opinions are missing? Is the information

presented in a balanced way? Can you detect any ideas or opinions that are missing?

Other good questions to ask yourself:

- Is there contact information that can be verified?
- Are there any links or footnotes to other relevant and reliable sources?
- Does the website use correct grammar, spelling and sentence structure?
- Are graphs and/or charts clearly labeled?
- Is the content current?
- Are there dates that show when the site was created and updated?

2) Be sure to make clear to your students that:

Recognizing credibility is not cut and dry. The credibility of some web sources may be hard to determine, but the questions posed in this activity will help.

Use the above questions subjectively to determine credibility. These questions are not a checklist. Some credible websites will not meet all of the criteria, and other unreliable websites may include other suspicious indicators not listed. These questions are designed to be an opportunity for students to practice locating, identifying, and processing various kinds of information.

3) Write down any examples that the students provide.

Divide the students into groups of 4-5. (Recommended: Internet access for students. Alternative: Print copies of the example websites for this activity on page 9, 10, and 11.)

Let the students know that they've been given the task of writing a scientific report about the subject:

"Could there be life on other planets?" As part of their research they should compare at least 3 websites.

Remind them of the "rule of 3" and its importance.

Say: Can anyone remind us what the Rule of Three means? Why is it good to compare at least 3 sources of information?" Get responses from the students.

In their groups, students will use the Source Comparison Tool (Student Handouts, 5 and 6) and other supplementary information -- Top Level Domain Extensions (Student Handouts, 4) -- to evaluate the relative quality of 3 sources. You will then discuss with the class which web sources were the most trustworthy and useful, and which sources were the least reliable and why.

If time allows, you can let each group search the Internet and select their sources on their own. If short

on time, you can select 3 sources from this list:

Activity (20 min)

Source List: Is There Life on Other Planets?

Questionable/biased web sources:

- <http://www.aliensthetruth.com/>
- <http://www.icr.org/article/can-life-existother-planets/>
- <http://www.nicap.org/articles/hillzeta.htm>
- <http://hubpages.com/hub/milky-way>
- <http://www.chacha.com/question/isthere-life-on-other-planets>
- <http://www.dvorak.org/blog/2006/08/02/nasa-needs-a-plan-for-telling-the-publicabout-life-on-other-planets/>
- http://www.gravitywarpdrive.com/Reticulan_EBE.htm
- <http://www.ufoevidence.org/>
- <http://www.ufos-aliens.co.uk/>
- http://www.answerbag.com/q_view/376966

Credible/objective web sources:

- <http://www.seti.org/>
- <http://astrobiology.nasa.gov/ask-anastrobiologist/popular/>

- <http://www.kepler.arc.nasa.gov/>
- http://www.nasa.gov/vision/earth/technologies/Life_Detector.html
- http://www.science.nasa.gov/headlines/y2010/04jan_fiveplanets.htm
- <http://cosmiclog.msnbc.msn.com/archive/2009/09/16/2072217.aspx>
- <http://www.israel21c.org/socialaction/israeli-fibers-help-nasa-locate-livable-planets-in-the-universe>
- <http://earthguide.ucsd.edu/virtualmuseum/litu/litusyllabus.shtml>
- <http://www.alicesastroinfo.com/2009/12/answering-questions-life-on-otherplanets/the-universe>

Examples of websites are included below:

- <http://www.aliensthetruth.com/> (questionable/biased/amateurish)
 - Number of visitors to the site
 - Focus is on persuasion than facts
 - The domain extension is .com
 - <http://www.ufos-aliens.co.uk/> (questionable/biased/amateurish)
 - The website is only sourced in one country -- UK
 - The focus is on conspiracies
 - It's calling for first-hand, non-vetted accounts of UFO sightings
 - There are several broken links and images
 - <http://www.kepler.arc.nasa.gov/> (credible/objective/expert)
 - Website is owned by a known and credible organization (you can tell by the domain extension – NASA)
 - The focus is on experiments and scientific accounts

