Califon Public School Curriculum

Subject: Technology	Grade: 5th	Unit #: 1	Pacing: 1 marking period
Unit Title: Computer Science – Part 1 (Computing Systems, Networks, the Internet, & Impacts of Computing)			

OVERVIEW OF UNIT:

Computer Science outlines a comprehensive set of concepts and skills, such as data and analysis, algorithms and programming, and computing systems.

Unit References	
Big Ideas	Essential Questions
• Computing devices may be connected to other devices to form a system as a way to extend their capabilities. • Software and hardware work together as a system to accomplish tasks (e.g., sending, receiving, processing, and storing units of information). • Shared features allow for common troubleshooting strategies that can be effective for many systems. • Information needs a physical or wireless path to travel to be sent and received. • Distinguishing between public and private information is important for safe and secure online interactions. • Information can be protected using various security measures (i.e., physical and digital).	• Why is it helpful for computing devices to be able to connect to other devices? • What is the importance of software and hardware work together? • How can you develop common troubleshooting strategies? • How is information sent and received? • What is the difference between public and private information? • How can we protect information? • What drives the development and modification of computing technology?

• The development and modification of computing technology is driven by individual's needs and wants and can affect individuals differently.	

Objectives

- Students will be able to determine the importance of computing devices being able to connect to other devices.
- Students will be able to analyze the importance of software and hardware working together.
- Students will be able to determine common troubleshooting strategies that are effective.
- Students will be able to determine how information is sent and received.
- Students will be able to contrast public and private information.
- Students will be able to describe how they may protect information.
- Students will be able to analyze information to find what drives the development and modification of computing technology.

Assessment

Formative Assessment:

- observation
- self-reflections
- teacher-student conferences

Summative Assessment:

- online quizzes & tests
- projects

Benchmark:

- Unit Pre-Test

Alternative:

- performance tasks
- projects

Key Vocabulary

- computing device
- components
- software
- hardware
- system
- troubleshooting
- transmit

- wired/wireless
- physical/digital security measures
- accessibility
- usability

Resources & Materials

- SMARTBoard
- Teacher-made resources

Technology Infusion

Teacher Technology:

- Chromebook
- Google Classroom
- SmartBoard

Student Technology:

- Google Classroom
- Chromebooks
- Internet Sources

Activities:

- Students will use Internet resources to research various computing technologies and create a visual or presentation that explains how these forms of technology have impacted our lives and what factors influenced these changes.

Standard	Standard Description
8.1.5.IC.1	Identify computing technologies that have impacted how individuals live and work and describe the factors that influenced the changes.

Interdisciplinary Integration

Activities:

Students will research various computing technologies and create a visual or presentation that explains how these forms of technology have impacted our lives and what factors influenced these changes.

Resources:

- Teacher Vision Cross Curricular Theme Map - https://www.teachervision.com/teaching-methods/curriculum-planning/7167.html
- Engineering Go For It! - http://egfi-k12.org/
- US Department of Education STEM - http://www.ed.gov/stem
- Intel STEM Resource - http://www.intel.com/content/www/us/en/education/k12/stem.html
- NASA STEM - http://www.nasa.gov/audience/foreducators/expeditions/stem/#.VYrO2flViko
- PBS STEM - http://www.pbs.org/teachers/stem/#content
- STEM Works - http://stem-works.com/activities
- What Every Education Should Know About Using Google by Shell Education
- Promoting Literacy in all Subjects by Glencoe - http://www.glencoe.com/sec/teachingtoday/subject/promoting_literacy.phtml
- International Literacy Association Read Write Think - http://www.readwritethink.org/

Standard	Standard Description
NJSLSA.R1	Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
NJSLSA.W6	Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

21st Century Life Skills Standards

Activities:

- Students will research various computing technologies and create a visual or presentation that explains how these forms of technology have impacted our lives and what factors influenced these changes.

Standard #	Student Learning Objectives
9.4.5.IML.1	Evaluate digital sources for accuracy, perspective, credibility and relevance.

Careers

Activities:

- Students will research various computing technologies and create a visual or presentation that explains how these forms of technology have impacted our lives and what factors influenced these changes.

CRP #	Practice
4	Communicate clearly and effectively and with reason.

Standards	
Standard #	Standard Description
8.1.5.CS.1	Model how computing devices connect to other components to form a system.
8.1.5.CS.2	Model how computer software and hardware work together as a system to accomplish tasks.
8.1.5.CS.3	Identify potential solutions for simple hardware and software problems using common troubleshooting strategies.
8.1.5.NI.1	Develop models that successfully transmit and receive information using both wired and wireless methods.
8.1.5.NI.2	Describe physical and digital security measures for protecting sensitive personal information.
8.1.5.IC.1	Identify computing technologies that have impacted how individuals live and work and describe the factors that influenced the changes.
8.1.5.IC.2	Identify possible ways to improve the accessibility and usability of computing technologies to address the diverse needs and wants of users.

Differentiation			
Special Education	English Language Learners (ELL)	Response to Intervention (RTI)	Enrichment
• Provide modifications & accommodations as listed in the student's IEP • Position student near helping peer or have quick access to teacher • Modify or reduce assignments/tasks • Reduce length of assignment for different mode of delivery • Increase one-to-one time • Prioritize tasks • Use graphic organizers • Use online resources for skill building • Provide teacher notes	• Provide text-to-speech • Use of translation dictionary or software • Provide graphic organizers • NJDOE resources - http://www.state.nj.us/education/aps/cccs/ELL.htm • Adapt a Strategy – Adjusting strategies for ESL students - http://www.teachersfirst.com/content/esl/adaptstrat.cfm	• Tiered interventions following RTI framework • Effective RTI strategies for teachers - http://www.specialeducationguide.com/pre-k-12/response-to-intervention/effective-rti-strategies-for-teachers/ • Interventional Central - http://www.interventioncentral.org/	• Process should be modified: higher order thinking skills, open-ended thinking, discovery • Utilize project-based learning for greater depth of knowledge • Utilize exploratory connections to higher grade concepts • Contents should be modified: real world problems, audiences, deadlines, evaluations, transformations • Learning environments should be modified:

• Use collaborative grouping strategies such as small groups • NJDOE resources - http://www.state.nj.us/education/specialed/			student-centered learning, independence, openness, complexity, groups varied • NJDOE resources - http://www.state.nj.us/education/aps/cccs/g_and_t_req.htm

Califon Public School
Curriculum

Subject: Technology	Grade: 5th	Unit #: 2	Pacing: 1 marking period
Unit Title: Computer Science – Part 2 (Data & Analysis and Algorithms & Programming)			

OVERVIEW OF UNIT:

Computer Science outlines a comprehensive set of concepts and skills, such as data and analysis, algorithms and programming, and computing systems.

Unit References	
Big Ideas	Essential Questions
• Data can be organized, displayed, and presented to highlight relationships. • The type of data being stored affects the storage requirements. • Individuals can select, organize, and transform data into different visual representations and communicate insights gained from the data. • Many factors influence the accuracy of inferences and predictions. • Different algorithms can achieve the same result. • Some algorithms are more appropriate for a specific use than others. • Programming languages provide variables, which are used to store and modify data. • A variety of control structures are used to change the flow of program execution (e.g., sequences, events, loops, conditionals).	• How can data be used to highlight relationships? • What affects storage requirements for data? • Why is it important to be able to select, organize, and transform data in different visual representations? • What factors influence the accuracy of inferences and predictions? • How can you determine what algorithm is meant to be used? • Where are you able to find variables? • What is used to change the flow of program execution? • What is an iterative process and how is it used when developing programs?

• Programs can be broken down into smaller parts to facilitate their design, implementation, and review. Programs can also be created by incorporating smaller portions of programs that already exist. • Individuals develop programs using an iterative process involving design, implementation, testing, and review.	

Objectives
• Students will be able to demonstrate how data can be organized, displayed, and presented to highlight relationships. • Students will be able to identify how the type of data being stored affects the storage requirements. • Students will be able to explain how individuals can select, organize, and transform data into different visual representations and communicate insights gained from the data. • Students will be able to compare the factors that influence the accuracy of inferences and predictions. • Students will be able to determine which algorithms are appropriate for specific uses. • Students will be able describe how programming languages provide variables, which are used to store and modify data. • Students will be able to demonstrate how a variety of control structures are used to change the flow of program execution (e.g., sequences, events, loops, conditionals). • Students will be able to summarize how individuals develop programs using an iterative process involving design, implementation, testing, and review.

Assessment	
Formative Assessment: • observation • self-reflections • teacher-student conferences **Summative Assessment:** • online quizzes & tests • projects	**Benchmark:** • Unit Pre-Test **Alternative:** • performance tasks • projects

Key Vocabulary
• storage space • data • climate change • algorithms • variables • sequences • loops • conditionals • sub-problems • modify, remix, incorporate • iterative process • implement

Resources & Materials
• SMARTBoard • Teacher-made resources

Technology Infusion
Teacher Technology: • Chromebook • Google Classroom • SmartBoard **Student Technology:** • Google Classroom • Chromebooks • Internet Sources

Activities:

- Students will use their Chromebooks to research climate change to find data to support a claim. They will then create a visual to display this data in a way that will support their claim. Finally, they will present their information and defend their claim.

Standard	Standard Description
8.1.5.DA.4	Organize and present climate change data visually to highlight relationships or support a claim.

Interdisciplinary Integration

Activities:

- Students will research climate change to find data to support a claim. They will then create a visual to display this data in a way that will support their claim. Finally, they will present their information and defend their claim.

Resources:

- Teacher Vision Cross Curricular Theme Map - https://www.teachervision.com/teaching-methods/curriculum-planning/7167.html
- Engineering Go For It! - http://egfi-k12.org/
- US Department of Education STEM - http://www.ed.gov/stem
- Intel STEM Resource - http://www.intel.com/content/www/us/en/education/k12/stem.html
- NASA STEM - http://www.nasa.gov/audience/foreducators/expeditions/stem/#.VYrO2flViko
- PBS STEM - http://www.pbs.org/teachers/stem/#content
- STEM Works - http://stem-works.com/activities
- What Every Education Should Know About Using Google by Shell Education
- Promoting Literacy in all Subjects by Glencoe - http://www.glencoe.com/sec/teachingtoday/subject/promoting_literacy.phtml
- International Literacy Association Read Write Think - http://www.readwritethink.org/

Standard	Standard Description
NJSLSA.R1	Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
NJSLSA.W6	Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

21st Century Life Skills Standards

Activities:

• Students will research climate change to find data to support a claim. They will then create a visual to display this data in a way that will support their claim. Finally, they will present their information and defend their claim.

Standard #	Student Learning Objectives
9.4.5.IML.1	Evaluate digital sources for accuracy, perspective, credibility and relevance.

Careers	
Activities: • Students will research climate change to find data to support a claim. They will then create a visual to display this data in a way that will support their claim. Finally, they will present their information and defend their claim.	
CRP #	Practice
4	Communicate clearly and effectively and with reason.

Standards	
Standard #	Standard Description
8.1.5.DA.1	Collect, organize, and display data in order to highlight relationships or support a claim.
8.1.5.DA.2	Compare the amount of storage space required for different types of data.
8.1.5.DA.3	Organize and present collected data visually to communicate insights gained from different views of the data.
8.1.5.DA.4	Organize and present climate change data visually to highlight relationships or support a claim.
8.1.5.DA.5	Propose cause and effect relationships, predict outcomes, or communicate ideas using data.
8.1.5.AP.1	Compare and refine multiple algorithms for the same task and determine which is the most appropriate.
8.1.5.AP.2	Create programs that use clearly named variables to store and modify data.
8.1.5.AP.3	Create programs that include sequences, events, loops, and conditionals.
8.1.5.AP.4	Break down problems into smaller, manageable sub-problems to facilitate program development.
8.1.5.AP.5	Modify, remix, or incorporate pieces of existing programs into one's own work to add additional features or create a new program.
8.1.5.AP.6	Develop programs using an iterative process, implement the program design, and test the program to ensure it works as intended.

Differentiation			
Special Education	English Language Learners (ELL)	Response to Intervention (RTI)	Enrichment
• Provide modifications & accommodations as listed in the student's IEP • Position student near helping peer or have quick access to teacher • Modify or reduce assignments/tasks • Reduce length of assignment for different mode of delivery • Increase one-to-one time • Prioritize tasks • Use graphic organizers • Use online resources for skill building • Provide teacher notes • Use collaborative grouping strategies such as small groups • NJDOE resources - http://www.state.nj.us/education/specialed/	• Provide text-to-speech • Use of translation dictionary or software • Provide graphic organizers • NJDOE resources - http://www.state.nj.us/education/aps/cccs/ELL.htm • Adapt a Strategy – Adjusting strategies for ESL students - http://www.teachersfirst.com/content/esl/adaptstrat.cfm	• Tiered interventions following RTI framework • Effective RTI strategies for teachers - http://www.specialeducationguide.com/pre-k-12/response-to-intervention/effective-rti-strategies-for-teachers/ • Interventional Central - http://www.interventioncentral.org/	• Process should be modified: higher order thinking skills, open-ended thinking, discovery • Utilize project-based learning for greater depth of knowledge • Utilize exploratory connections to higher grade concepts • Contents should be modified: real world problems, audiences, deadlines, evaluations, transformations • Learning environments should be modified: student-centered learning, independence, openness, complexity, groups varied • NJDOE resources - http://www.state.nj.us/education/aps/cccs/g_and_t_req.htm

Califon Public School
Curriculum

Subject: Technology	Grade: 5th	Unit #: 3	Pacing: 1 marking period
Unit Title: Design Thinking (Engineering Design & Nature of Technology)			

OVERVIEW OF UNIT:

Design thinking outlines the technological design concepts and skills essential for technological and engineering literacy.

Unit References	
Big Ideas	Essential Questions
• Engineering design is a systematic and creative process of communicating and collaborating to meet a design challenge. • Engineering design requirements include desired features and limitations that need to be considered. • Engineers create and modify technologies to meet people's needs and wants; scientists ask questions about the natural world.	• What is engineering design? • What requirements need to be involved with engineering design? • What factors have influenced technology innovation and improvement?

Objectives

- Students will be able to describe the process of engineering design.
- Students will be able to identify the requirements needed when following the engineering design process.
- Students will be able to summarize how technology innovation and improvement has been influenced by different factors.

Assessment

Formative Assessment:
- observation
- self-reflections
- teacher-student conferences

Benchmark:
- Unit Pre-Test

Summative Assessment:

- online quizzes & tests
- projects

Alternative:

- performance tasks
- projects

Key Vocabulary

- function
- system
- subsystem
- assemble
- product
- development
- engineering design process
- alternative solutions
- constraints
- tradeoffs
- troubleshoot
- demands
- values
- interests

Resources & Materials

- SMARTBoard
- Teacher-made resources

Technology Infusion

Teacher Technology:

- Chromebook
- Google Classroom
- SmartBoard

Student Technology:

- Google Classroom
- Chromebooks
- Internet Sources

Activities:

- Students will choose a product and research its current use. They will then work in a collaborative group to redesign the product for a different purpose.

Standard	Standard Description
8.2.5.NT.3	Redesign an existing product for a different purpose in a collaborative team.

Interdisciplinary Integration

Activities:

Students will choose a product and research its current use. They will then work in a collaborative group to redesign the product for a different purpose.

Resources:

- Teacher Vision Cross Curricular Theme Map - https://www.teachervision.com/teaching-methods/curriculum-planning/7167.html
- Engineering Go For It! - http://egfi-k12.org/
- US Department of Education STEM - http://www.ed.gov/stem
- Intel STEM Resource - http://www.intel.com/content/www/us/en/education/k12/stem.html
- NASA STEM - http://www.nasa.gov/audience/foreducators/expeditions/stem/#.VYrO2flViko
- PBS STEM - http://www.pbs.org/teachers/stem/#content
- STEM Works - http://stem-works.com/activities
- What Every Education Should Know About Using Google by Shell Education
- Promoting Literacy in all Subjects by Glencoe - http://www.glencoe.com/sec/teachingtoday/subject/promoting_literacy.phtml
- International Literacy Association Read Write Think - http://www.readwritethink.org/

Standard	Standard Description

NJSLSA.R1	Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
NJSLSA.W6	Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

21st Century Life Skills Standards	
Activities: ● Students will choose a product and research its current use. They will then work in a collaborative group to redesign the product for a different purpose.	
Standard #	Student Learning Objectives
9.4.5.IML.1	Evaluate digital sources for accuracy, perspective, credibility and relevance.

Careers	
Activities: ● Students will choose a product and research its current use. They will then work in a collaborative group to redesign the product for a different purpose.	
CRP #	Practice
4	Communicate clearly and effectively and with reason.

Standards	
Standard #	Standard Description
8.2.5.ED.1	Explain the functions of a system and its subsystems.
8.2.5.ED.2	Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models.
8.2.5.ED.3	Follow step by step directions to assemble a product or solve a problem, using appropriate tools to accomplish the task.
8.2.5.ED.4	Explain factors that influence the development and function of products and systems (e.g., resources, criteria, desired features, constraints).
8.2.5.ED.5	Describe how specifications and limitations impact the engineering design process.
8.2.5.ED.6	Evaluate and test alternative solutions to a problem using the constraints and tradeoffs identified in the design process.
8.2.5.NT.1	Troubleshoot a product that has stopped working and brainstorm ideas to correct the problem.

8.2.5.NT.2	Identify new technologies resulting from the demands, values, and interests of individuals, businesses, industries, and societies.
8.2.5.NT.3	Redesign an existing product for a different purpose in a collaborative team.
8.2.5.NT.4	Identify how improvement in the understanding of materials science impacts technologies.

Differentiation			
Special Education	English Language Learners (ELL)	Response to Intervention (RTI)	Enrichment
• Provide modifications & accommodations as listed in the student's IEP • Position student near helping peer or have quick access to teacher • Modify or reduce assignments/tasks • Reduce length of assignment for different mode of delivery • Increase one-to-one time • Prioritize tasks • Use graphic organizers • Use online resources for skill building • Provide teacher notes • Use collaborative grouping strategies such as small groups • NJDOE resources - http://www.state.nj.us/education/specialed/	• Provide text-to-speech • Use of translation dictionary or software • Provide graphic organizers • NJDOE resources - http://www.state.nj.us/education/aps/cccs/ELL.htm • Adapt a Strategy – Adjusting strategies for ESL students - http://www.teachersfirst.com/content/esl/adaptstrat.cfm	• Tiered interventions following RTI framework • Effective RTI strategies for teachers - http://www.specialeducationguide.com/pre-k-12/response-to-intervention/effective-rti-strategies-for-teachers/ • Interventional Central - http://www.interventioncentral.org/	• Process should be modified: higher order thinking skills, open-ended thinking, discovery • Utilize project-based learning for greater depth of knowledge • Utilize exploratory connections to higher grade concepts • Contents should be modified: real world problems, audiences, deadlines, evaluations, transformations • Learning environments should be modified: student-centered learning, independence, openness, complexity, groups varied • NJDOE resources - http://www.state.nj.us/education/aps/cccs/g_and_t_req.htm

Califon Public School
Curriculum

Subject: Technology	Grade: 5th	Unit #: 4	Pacing: 1 marking period
Unit Title: Design Thinking (Interaction of Technology & Humans, Effects of Technology on the Natural World, Ethics & Culture)			

OVERVIEW OF UNIT:

Design thinking outlines the technological design concepts and skills essential for technological and engineering literacy.

Unit References	
Big Ideas	Essential Questions
• Societal needs and wants determine which new tools are developed to address real-world problems. • A new tool may have favorable or unfavorable results as well as both positive and negative effects on society. • Technology spurs new businesses and careers. • The technology developed for the human designed world can have unintended consequences for the environment.	• Why are new tools developed to address real-world problems? • What effects may new tools have on society? • What businesses and careers have been developed due to new technology? • How does new technology have an impact on the environment?

Objectives
• Students will be able to determine what leads to new tools being developed to address real-world problems. • Students will be able to compare and contrast the effects new tools have on society. • Students will be able to research how technology has influenced the development of new businesses and careers. • Students will be able to justify how new technology impacts the environment in positive and negative ways.

Assessment

Formative Assessment:

- observation
- self-reflections
- teacher-student conferences

Summative Assessment:

- online quizzes & tests
- projects

Benchmark:

- Unit Pre-Test

Alternative:

- performance tasks
- projects

Key Vocabulary

- societal needs & wants
- function
- shortcomings
- product
- system
- consequences
- resources
- human-designed systems
- impact
- climate change
- inequities

Resources & Materials

- SMARTBoard
- Teacher-made resources

Technology Infusion

Teacher Technology:

- Chromebook
- Google Classroom

- SmartBoard

Student Technology:

- Google Classroom
- Chromebooks
- Internet Sources

Activities:

- Students will use internet sources to research a specific product and explain how societal needs and wants influence its development and function.

Standard	Standard Description
8.2.5.ITH.1	Explain how societal needs and wants influence the development and function of a product and a system.

Interdisciplinary Integration

Activities:

- Students will research a specific product and explain how societal needs and wants influence its development and function.

Resources:

- Teacher Vision Cross Curricular Theme Map - https://www.teachervision.com/teaching-methods/curriculum-planning/7167.html
- Engineering Go For It! - http://egfi-k12.org/
- US Department of Education STEM - http://www.ed.gov/stem
- Intel STEM Resource - http://www.intel.com/content/www/us/en/education/k12/stem.html
- NASA STEM - http://www.nasa.gov/audience/foreducators/expeditions/stem/#.VYrO2flViko
- PBS STEM - http://www.pbs.org/teachers/stem/#content
- STEM Works - http://stem-works.com/activities
- What Every Education Should Know About Using Google by Shell Education
- Promoting Literacy in all Subjects by Glencoe - http://www.glencoe.com/sec/teachingtoday/subject/promoting_literacy.phtml
- International Literacy Association Read Write Think - http://www.readwritethink.org/

Standard	Standard Description

NJSLSA.R1	Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
NJSLSA.W6	Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

21st Century Life Skills Standards	
Activities: ● Students will research a specific product and explain how societal needs and wants influence its development and function.	
Standard #	Student Learning Objectives
9.4.5.IML.1	Evaluate digital sources for accuracy, perspective, credibility and relevance.

Careers	
Activities: ● Students will research a specific product and explain how societal needs and wants influence its development and function.	
CRP #	Practice
4	Communicate clearly and effectively and with reason.

Standards	
Standard #	Standard Description
8.2.5.ITH.1	Explain how societal needs and wants influence the development and function of a product and a system.
8.2.5.ITH.2	Evaluate how well a new tool has met its intended purpose and identify any shortcomings it might have.
8.2.5.ITH.3	Analyze the effectiveness of a new product or system and identify the positive and/or negative consequences resulting from its use.
8.2.5.ITH.4	Describe a technology/tool that has made the way people live easier or has led to a new business or career.
8.2.5.ETW.1	Describe how resources such as material, energy, information, time, tools, people, and capital are used in products or systems.
8.2.5.ETW.2	Describe ways that various technologies are used to reduce improper use of resources.
8.2.5.ETW.3	Explain why human-designed systems, products, and environments need to be constantly monitored, maintained, and improved.
8.2.5.ETW.4	Explain the impact that resources, such as energy and materials used to develop technology, have on the environment.
8.2.5.ETW.5	Identify the impact of a specific technology on the environment and determine what can be done to increase positive effects and to reduce any negative effects, such as climate change.

8.2.5.EC.1	Analyze how technology has contributed to or reduced inequities in local and global communities and determine its short- and long-term effects.

Differentiation			
Special Education	English Language Learners (ELL)	Response to Intervention (RTI)	Enrichment
• Provide modifications & accommodations as listed in the student's IEP • Position student near helping peer or have quick access to teacher • Modify or reduce assignments/tasks • Reduce length of assignment for different mode of delivery • Increase one-to-one time • Prioritize tasks • Use graphic organizers • Use online resources for skill building • Provide teacher notes • Use collaborative grouping strategies such as small groups • NJDOE resources - http://www.state.nj.us/education/specialed/	• Provide text-to-speech • Use of translation dictionary or software • Provide graphic organizers • NJDOE resources - http://www.state.nj.us/education/aps/cccs/ELL.htm • Adapt a Strategy – Adjusting strategies for ESL students - http://www.teachersfirst.com/content/esl/adaptstrat.cfm	• Tiered interventions following RTI framework • Effective RTI strategies for teachers - http://www.specialeducationguide.com/pre-k-12/response-to-intervention/effective-rti-strategies-for-teachers/ • Interventional Central - http://www.interventioncentral.org/	• Process should be modified: higher order thinking skills, open-ended thinking, discovery • Utilize project-based learning for greater depth of knowledge • Utilize exploratory connections to higher grade concepts • Contents should be modified: real world problems, audiences, deadlines, evaluations, transformations • Learning environments should be modified: student-centered learning, independence, openness, complexity, groups varied • NJDOE resources - http://www.state.nj.us/education/aps/cccs/g_and_t_req.htm