Unit 1: Introduction to the Keyboard (Proper Typing Techniques, Speed & Accuracy)

Content Area: **Technology**
Course(s): **Sample Course**
Time Period: **SeptOct**
Length: **20 days, Grades 9-12**
Status: **Published**

Unit 1: Introduction to the Keyboard (Proper Typing Techniques, Speed & Accuracy)

Department of Curriculum and Instruction

Belleville Public Schools

Curriculum Guide

College Keyboarding

Grades 9-12

Belleville Board of Education

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Board Approved: September 23, 2019

Unit Overview

Throughout this unit, students will learn the proper techniques to typing and correct placement of fingers on the keyboard. Using the home row keys, students will build upon their typing skills, increasing speed, accuracy and proper finger placement.

Enduring Understanding

- Common vocabulary associated with the program and unit.
- Successfully increase speed and accuracy in their typing.
- Understand and identify the home row keysTechnology is always changing and we need to be lifelong learners.
- Technology is always changing and we need to be lifelong learners.
- We should use technology based on our personal and/or career needs.
- A tool is only as good as the person using it.
- Digital tools allow for communication and collaboration anytime/anyplace worldwide.

Essential Questions

- Can the student successfully type the proper way?
- Will their speed and accuracy increase throughout the semester?
- What are the home row keys?
- Why is it important to utilize the home row keys to properly type?
- What does WPM stand for?
- How can I use my digital tools and skills in new situations?
- How do I choose the right digital tools and when do I use them?

Exit Skills

- Correctly Identify the home row keys
- Use the home row keys to increase speed and accuracy while typing
- Memorize the keyboard diagram

New Jersey Student Learning Standards (NJSLS-S)

TECH.8.1.12.A	Technology Operations and Concepts: Students demonstrate a sound understanding of technology concepts, systems and operations.
TECH.8.1.12.A.1	Create a personal digital portfolio which reflects personal and academic interests, achievements, and career aspirations by using a variety of digital tools and resources.
TECH.8.1.12.A.2	Produce and edit a multi-page digital document for a commercial or professional audience and present it to peers and/or professionals in that related area for review.
TECH.8.1.12.A.3	Collaborate in online courses, learning communities, social networks or virtual worlds to discuss a resolution to a problem or issue.
TECH.8.1.12.A.4	Construct a spreadsheet workbook with multiple worksheets, rename tabs to reflect the data on the worksheet, and use mathematical or logical functions, charts and data from all worksheets to convey the results.
TECH.8.1.12.A.CS1	Understand and use technology systems.
TECH.8.1.12.A.CS2	Select and use applications effectively and productively.
TECH.8.1.12.B.CS1	Apply existing knowledge to generate new ideas, products, or processes.
TECH.8.1.12.B.CS2	Create original works as a means of personal or group expression.
TECH.8.1.12.D	Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
TECH.8.1.12.D.CS1	Advocate and practice safe, legal, and responsible use of information and technology.
TECH.8.1.12.D.CS3	Exhibit leadership for digital citizenship.
TECH.8.1.12.E	Research and Information Fluency: Students apply digital tools to gather, evaluate, and use information.
TECH.8.1.12.E.CS2	Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.

Interdisciplinary Connections

LA.RH.6-8.7	Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.

LA.WHST.6-8.2.A	Introduce a topic and organize ideas, concepts, and information using text structures (e.g., definition, classification, comparison/contrast, cause/effect, etc.) and text features (e.g., headings, graphics, and multimedia) when useful to aiding comprehension.
LA.WHST.6-8.4	Produce clear and coherent writing in which the development, organization, voice, and style are appropriate to task, purpose, and audience.
LA.WHST.6-8.6	Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.

Learning Objectives

- Identify the home row keys
- Use the home row keys to increase speed and accuracy while typing
- Measure memorization skills and understading of the keyboard diagram
- Develop proper input techniques (e.g., keyboarding, scanning, speech recognition, handwriting recognition, and the use of a touch screen or mouse),
- including safety methods to avoid repetitive strain injury.
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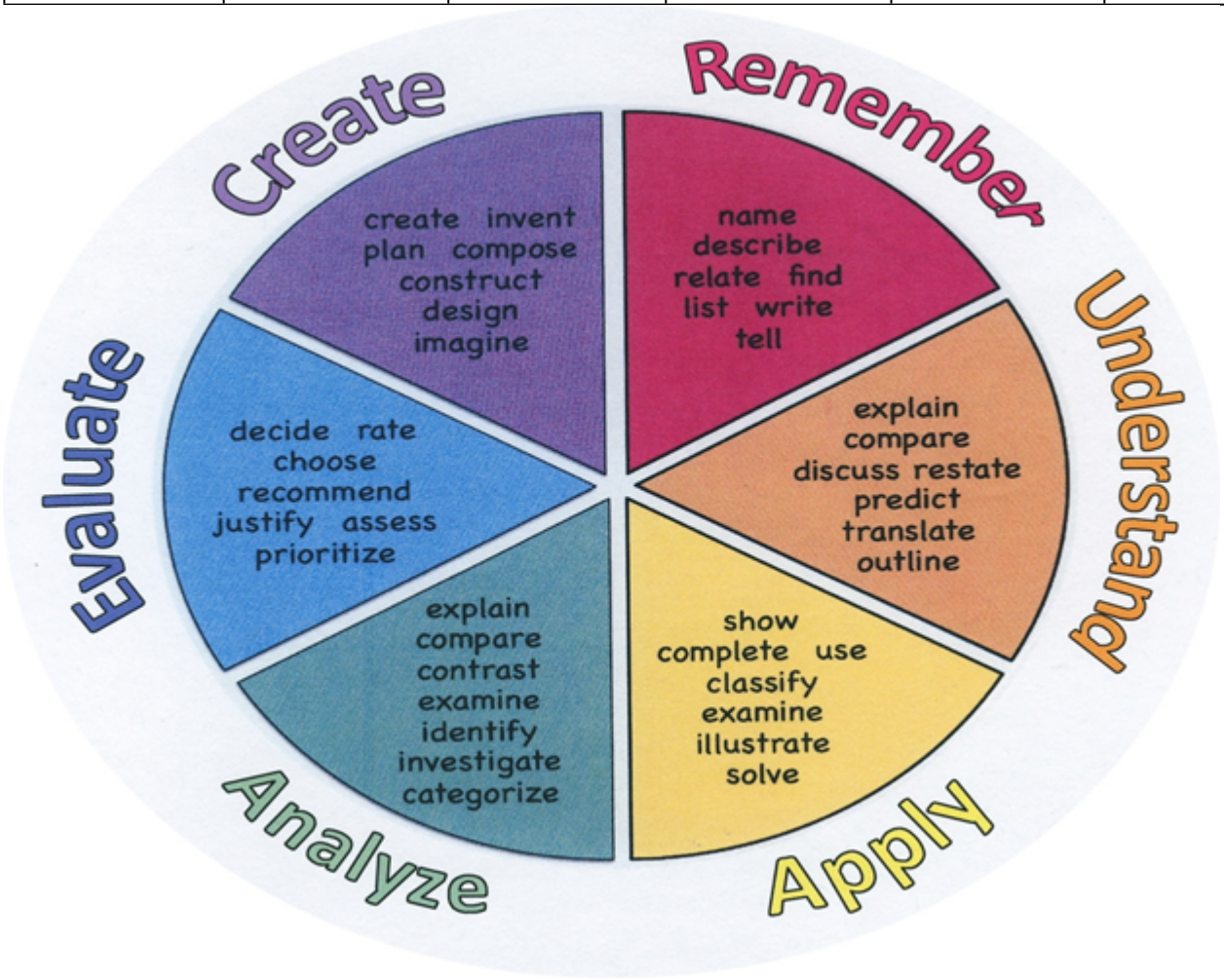
    - Enter and manipulate numeric data using the touch method on a 10-key keypad.
    - Identify, compare, and explain features of various keyboards.
    - Use a variety of input technologies.
    - Develop input technology skills for acceptable speed and accuracy levels that adhere to principles of repetitive strain avoidance.
    - Describe the safe and appropriate use of input tools and techniques.

Remember	Understand	Apply	Analyze	Evaluate	Create
Choose	Classify	Choose	Categorize	Appraise	Combine
Describe	Defend	Dramatize	Classify	Judge	Compose
Define	Demonstrate	Explain	Compare	Criticize	Construct
Label	Distinguish	Generalize	Differentiate	Defend	Design
List	Explain	Judge	Distinguish	Compare	Develop
Locate	Express	Organize	Identify	Assess	Formulate
Match	Extend	Paint	Infer	Conclude	Hypothesize
Memorize	Give Examples	Prepare	Point out	Contrast	Invent
Name	Illustrate	Produce	Select	Critique	Make
Omit	Indicate	Select	Subdivide	Determine	Originate
Recite	Interrelate	Show	Survey	Grade	Organize
Select	Interpret	Sketch	Arrange	Justify	Plan
State	Infer	Solve	Breakdown	Measure	Produce
Count	Match	Use	Combine	Rank	Role Play
Draw	Paraphrase	Add	Detect	Rate	Drive
Outline	Represent	Calculate	Diagram	Support	Devise
Point	Restate	Change	Discriminate	Test	Generate
Quote	Rewrite	Classify	Illustrate		Integrate
Recall	Select	Complete	Outline		Prescribe
Recognize	Show	Compute	Point out		Propose
Repeat	Summarize	Discover	Separate		Reconstruct
Reproduce	Tell	Divide			Revise
	Translate	Examine			Rewrite
	Associate	Graph			Transform
	Compute	Interpolate			
	Convert	Manipulate			
	Discuss	Modify			

	Estimate Extrapolate Generalize Predict	Operate Subtract			



Suggested Activities & Best Practices

Best practices for teaching keyboarding

Put your students' skills to the test:
Have students take the same typing test at regular intervals and watch their typing skills improve over time. Nothing is more motivating for your students than seeing their speed increase, and after a few months of diligent practice, they should notice that typing has become much easier.

- **Allow corrections:** Backspace can be either enabled or disabled; the choice is yours. We recommend enabling it with

beginners as the inability to correct mistakes could result in frustration. Advanced typists can disable the backspace to further challenge their typing skills.

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- **Assign a range of lessons:** In order to ensure that your class stays together and that proper attention is given to each skill, use the assign a range of lessons feature. Allow students to work within a given range of lessons and encourage them to repeat the lessons in order to earn all 5 stars on each lesson.

- **Adjust the difficulty:** You can adjust difficulty on a student by student or class-wide basis. If a particular student is struggling or needs more of a challenge, you can adjust the WPM requirements to keep them engaged.
- **Create cross-curricular content:** While students are improving their typing, they can also reinfornce their knowledge about other subjects.

Suggested Activities

Start Keyboarding Lessons Early with Games

Games that let students strengthen their mouse skills and then gradually introduces them to the keyboard.

Try Unplugged Typing Lessons

Since typing requires muscle memory and the regular use of hands and fingers, some educators suggest **going unplugged for beginner lessons**.

Gamify Further with Keyboarding Competitions

Once students are familiar with the basics concepts of keyboarding, competitions and challenges are a great way to make the repetitive practice fun.

Assessment Evidence - Checking for Understanding (CFU)

During the year measure students' growth through periodic performance-based assessments (timed typing tests). Use the district-selected instructional program to deliver keyboarding instruction and provide opportunities for students to apply keyboarding skills through a variety of activities, projects, and assignments. Teacher observation and weekly assessments will be used to monitor student learning. District Benchmark Tests will be administered at checkpoints with results being reviewed to determine specific instructional adjustments to make. Students will have the opportunity to apply keyboarding skills frequently and feedback and support will be given that guides students to increase their performance in those areas.

Speed and accuracy will be measured, and to reach proficiency at this grade level, students must reach a minimum of 35 WPM with 90% accuracy by the end of the course.

Unit test-summative assessment

Admit/Exit ticket-formative assessment

Web-based assessment-alternate assessment

Create a Multimedia poster-benchmark assessment

- Admit Tickets
- Anticipation Guide
- Common Benchmarks
- Compare & Contrast
- Create a Multimedia Poster
- DBQ's
- Define
- Describe
- Evaluate
- Evaluation rubrics
- Exit Tickets
- Explaining
- Fist- to-Five or Thumb-Ometer
- Illustration
- Journals
- KWL Chart
- Learning Center Activities
- Multimedia Reports
- Newspaper Headline
- Outline
- Question Stems
- Quickwrite
- Quizzes
- Red Light, Green Light
- Self- assessments
- Socratic Seminar
- Study Guide

- Surveys
- Teacher Observation Checklist
- Think, Pair, Share
- Think, Write, Pair, Share
- Top 10 List
- Unit review/Test prep
- Unit tests
- Web-Based Assessments
- Written Reports

Primary Resources & Materials

Century 21™ Computer Keyboarding, Lessons 1-80 (Century 21 Keyboarding) 9th Edition

by Jack P. Hoggatt (Author), Jon A. Shank (Author)

Ancillary Resources

Keyboarding Resources

Dance Mat Typing--A fun colourful website with animation and games introducing touch typing.

TypingWeb--*TypingWeb* is a free online typing tutor for typists of all skill levels. *TypingWeb's* free Teacher Portal also allows schools to utilize *TypingWeb* in the classroom.

Keyboarding Games and Exercises for Kids--A variety of fun activities to enhance keyboarding skills.

Free Typing Games--Premiere site to play free typing games, lessons, and tests. Our Typing Tutor is the best way to learn to type. No downloads, installations or registration required.

Typing Playground--Home to the largest collection of original typing resources on the Internet.

e-Learning for Kids--Keyboard Skills---Become a master Type-E-Chi through a series of engaging and entertaining introductory keyboard lessons.

e-Learning for Kids---Computer Skills---Choose from a variety of computer and keyboarding skills that teach lessons and concepts at different levels. (These options are from the same group of resources as mentioned above.)

Learning Games for Kids---Keyboarding Skills---Learning typing is the focus of these keyboarding games. Learning keyboarding skills is vital for today's learners and tomorrow's earners. These free typing games are a great way to build typing skills. Keyboarding games teach important skills through a variety of online typing lessons and typing games. And they are fun!

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Technology Infusion

Integrate into Class Inquiry

Within a month of starting a keyboarding program, have students use their growing skills authentically in class projects. This can be book reports, research, a brochure for history class, or a collaborative document through Google Apps. The keyboarding is a tool to communicate knowledge in a subject, much like a pencil, an artist brush or a violin. The better their keyboarding skills, the easier it is to complete the meat of the project, like a blog response, trading cards on characters in a book, or a family tree.

Remind students to use the keyboarding skills they've learned to make this real-life experience easier -- hands on their own side of the keyboard, use all fingers, good posture, elbows at their sides. Let their team of grade level teachers know what traits to look for as students research on class computers or in the library. Get parents to reinforce it at home.

Using keyboarding is the most effective way to learn it. It won't take long before keyboarding with good technique will be habit.

ASCII Art

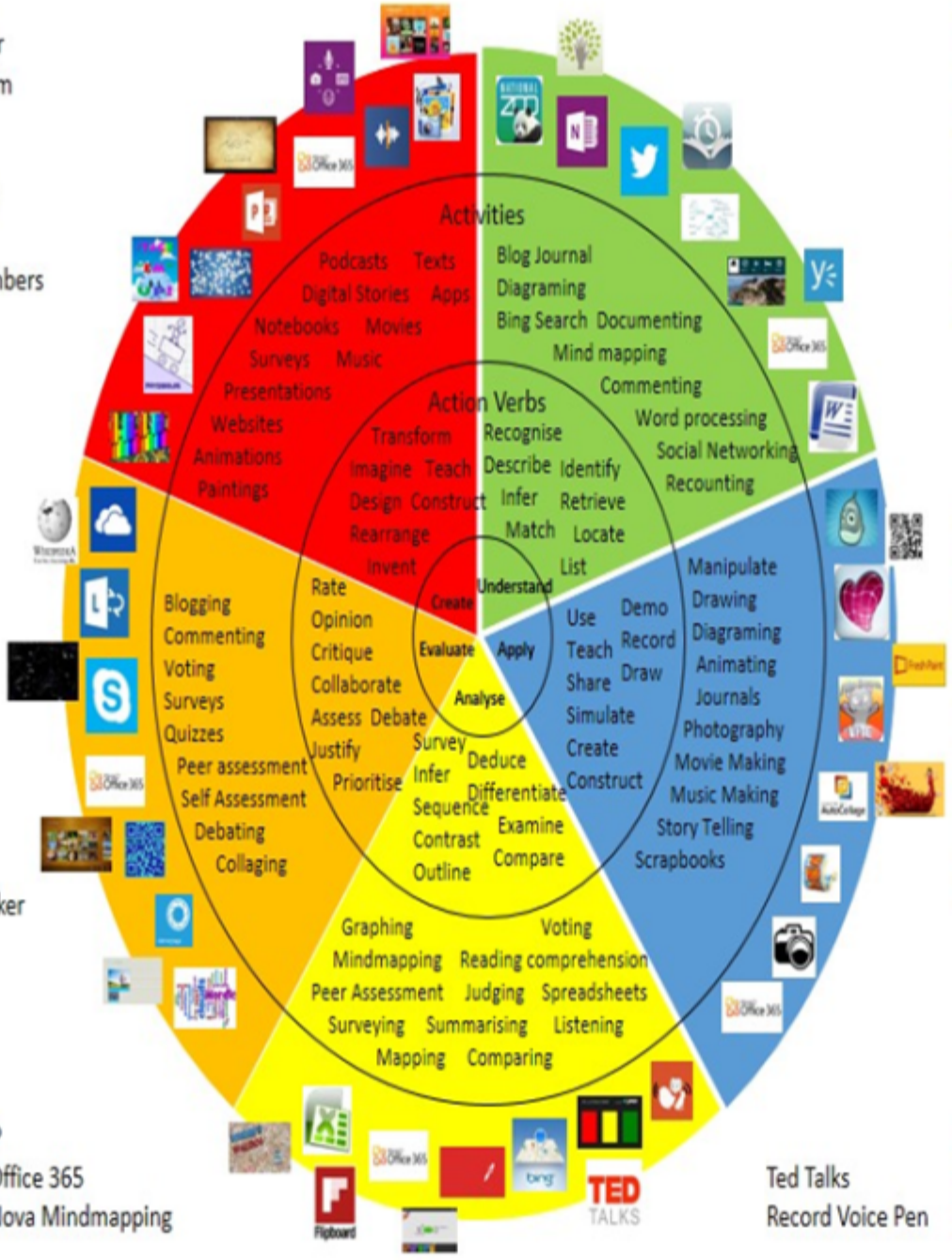
ASCII Art uses keyboarding skills to create artistic representations of class learning. This is a fun way to use keyboarding in other classes. All students do is find a picture that represents the class inquiry topic being addressed, put it as a watermark into the word processing program, type over the washed out image with a variety of keys, then delete the watermark. This takes about 30 minutes and always excites students with its uniqueness.

- Write reports.
- Comment on discussion boards and blogs.
- Journal in blogs and online tools like Penzu.
- Research online (type addresses into a search bar).
- Take digital notes (using Evernote, OneNote and similar).
- Collaborate on Google Apps like docs, sheets, presentations.
- Take online quizzes (like PARCC, SB).
- Use online tools for core classes (Wordle, Animoto, Story Creators).

Win 8.1 Apps/Tools Pedagogy Wheel

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

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



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

Ted Talks
Record Voice Pen

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

Alignment to 21st Century Skills & Technology

LA.RST.6-8.1	Cite specific textual evidence to support analysis of science and technical texts.
LA.WHST.6-8.1.D	Establish and maintain a formal/academic style, approach, and form.
LA.WHST.6-8.2.A	Introduce a topic and organize ideas, concepts, and information using text structures (e.g., definition, classification, comparison/contrast, cause/effect, etc.) and text features (e.g., headings, graphics, and multimedia) when useful to aiding comprehension.
LA.WHST.6-8.2.D	Use precise language and domain-specific vocabulary to inform about or explain the topic.
CRP.K-12.CRP1.1	Career-ready individuals understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good.
CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP4	Communicate clearly and effectively and with reason.
CRP.K-12.CRP6	Demonstrate creativity and innovation.
TECH.8.1.12	Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

21st Century Skills/Interdisciplinary Themes

21st Century/Interdisciplinary Themes that could be incorporated into this unit.

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

CRP.K-12.CRP9.1	Career-ready individuals consistently act in ways that align personal and community-held

	ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' action, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture.
CRP.K-12.CRP11.1	Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks.
CRP.K-12.CRP12.1	Career-ready individuals positively contribute to every team, whether formal or informal. They apply an awareness of cultural difference to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings.

21st Century Skills

21st Century Skills that could be incorporated into this unit.

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

HPE.2.1.12.D.CS1	Evaluating the potential for injury prior to engaging in unhealthy/risky behaviors impacts choices.
HPE.2.4.12	All students will acquire knowledge about the physical, emotional, and social aspects of human relationships and sexuality and apply these concepts to support a healthy, active lifestyle.

Differentiation

Differentiated Lesson Plans

Differentiations:

- Small group instruction
- Small group assignments
- Extra time to complete assignments
- Pairing oral instruction with visuals

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

Hi-Prep Differentiations:

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

Lo-Prep Differentiations

- Choice of books or activities
- Cubing activities
- Exploration by interest
- Flexible grouping
- Goal setting with students

- Jigsaw
- Mini workshops to re-teach or extend skills
- Open-ended activities
- Think-Pair-Share
- Reading buddies
- Varied journal prompts
- Varied supplemental materials

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

Check work frequently for understanding

Special Education Learning adaptations that will be employed in this unit, using the ones identified below.

- printed copy of board work/notes provided
- additional time for skill mastery
- assistive technology
- behavior management plan
- Center-Based Instruction
- check work frequently for understanding
- computer or electronic device utilizes
- extended time on tests/ quizzes
- have student repeat directions to check for understanding
- highlighted text visual presentation
- modified assignment format
- modified test content
- modified test format
- modified test length
- multi-sensory presentation
- multiple test sessions
- preferential seating
- preview of content, concepts, and vocabulary
- Provide modifications as dictated in the student's IEP/504 plan
- reduced/shortened reading assignments
- Reduced/shortened written assignments

- secure attention before giving instruction/directions
- shortened assignments
- student working with an assigned partner
- teacher initiated weekly assignment sheet
- Use open book, study guides, test prototypes

English Language Learning (ELL)

COMMUNICATE WITH THE ESL TEACHER

English Language Learning adaptations that will be employed in this unit, using the adaptions identified below.

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

At Risk

Using authentic assessments with real-life problem-solving

Intervention Strategies that will be employed in this unit, using the strategies identified below.

- allowing students to correct errors (looking for understanding)
- teaching key aspects of a topic. Eliminate nonessential information
- allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slide shows, videos, etc.) to demonstrate student's learning
- allowing students to select from given choices

- allowing the use of note cards or open-book during testing
- collaborating (general education teacher and specialist) to modify vocabulary, omit or modify items to reflect objectives for the student, eliminate sections of the test, and determine how the grade will be determined prior to giving the test.
- decreasing the amount of workpresented or required
- having peers take notes or providing a copy of the teacher's notes
- marking students' correct and acceptable work, not the mistakes
- modifying tests to reflect selected objectives
- providing study guides
- reducing or omitting lengthy outside reading assignments
- reducing the number of answer choices on a multiple choice test
- tutoring by peers
- using authentic assessments with real-life problem-solving
- using true/false, matching, or fill in the blank tests in lieu of essay tests
- using videos, illustrations, pictures, and drawings to explain or clarify

Talented and Gifted Learning (T&G)

Advanced problem-solving

Talented and Gifted adaptations that will be employed in this unit, using the adaptions identified below.

- Above grade level placement option for qualified students
- Advanced problem-solving
- Allow students to work at a faster pace
- Cluster grouping
- Complete activities aligned with above grade level text using Benchmark results
- Create a blog or social media page about their unit
- Create a plan to solve an issue presented in the class or in a text
- Debate issues with research to support arguments
- Flexible skill grouping within a class or across grade level for rigor
- Higher order, critical & creative thinking skills, and discovery
- Multi-disciplinary unit and/or project
- Teacher-selected instructional strategies that are focused to provide challenge, engagement, and growth opportunities
- Utilize exploratory connections to higher-grade concepts
- Utilize project-based learning for greater depth of knowledge

Sample Lesson

Unit Name: Intro to Keyboarding

Interdisciplinary Connection: Writing- analysis/evaluation

Statement of Objective: SWDAT identify and incoporate proper typing technques and skills required to successfully increase speed and accuracy by a minimum of 50% from starting point by the end of February.

Anticipatory Set/Do Now: Type the following words 3x each: ride his fish die said kiss

Learning Activity:Continue using Proper Typing Techniques; Learn O, T, N, G keys

Student Assessment/CFU's: Observation, Journal Entry, Oral Questioning

Materials: Textbook, Keyboard Diagram Worksheets

21st Century Themes and Skills:

Differentiation: Visual Learners, Direct Instruction, Guided Instruction, allow for extra time for students with IEP

Integration of Technology: Smartboard, Computers

Standards
TECH.8.1.12.C.CS2, TECH.8.1.12.A.CS1, TECH.8.1.12.A.1, TECH.8.1.12.A.CS2

21st Century (NJ Specific)
Communication and Collaboration
Life and Career Skills

Checking For Understanding/CFU's
Describe
One Lesson per Curriculum must bein this lesson plan template. I.e. one lesson in one unit