

# **Ronda Nicholson**

## **5E Lesson Plan Ideas**

Subject area / course / grade level	Technology- Learning External Computer Hardware Basics- looking outside the computer. 9-10 <sup>th</sup> grade.
Standards (State and ISTE Standards for Students)	Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats, and digital media appropriate to their goals.
Alabama State Standards:	<ul> <li>(9) Practice ethical and legal use of technology systems and digital content.</li> <li>(8) Collect information from a variety of digital sources.</li> <li>(10) Use digital environments to collaborate and communicate.</li> </ul>
ISTE	<ul> <li>(1c) Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.</li> <li>(1d) Students understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies, and can transfer their knowledge to explore emerging technologies.</li> <li>(2c) Students demonstrate an understanding of respect for the rights and obligations of using and sharing intellectual property.</li> <li>(3d) Students build knowledge by actively exploring real-world issues and problems, developing ideas. Theories and pursuing answers and solutions.</li> </ul>
Objectives	<ul> <li>Students will be able to identify external parts of a computer.</li> <li>Students will learn various external hardware that makes a computer work.</li> <li>Students will use technology (google forms, external computer parts, and snipping tools) to show learning.</li> </ul>
Differentiation Strategies: How will the lesson address the various learning styles of the students and the needs of those with special needs?	<ul> <li>This lesson addresses the following learning styles for Special Needs accommodations.</li> <li>Students will be assigned an instructional aide for added support.</li> <li>Lesson will be modified to meet IEP standards.</li> <li>More time will be allotted to meet the needs of the students.</li> </ul>

### The 5Es

E	Information and Description			
Engagement	To engage students in my lesson, I will start by asking a question about external parts of a computer. I will incorporate a YouTube video to engage the students on the topic. By watching this video, it will show students what to expect from this assignment. These videos describe external parts of a computer and why they make the computer work.			
	Assessment			
	<b>Attention Grabber:</b> Ask students if anyone can name the external parts of a computer? Pause for questions and answers. Show videos to introduce students to the external parts of a computer.			
	Show YouTube video: <u>Types of Hardware</u>			
	Show YouTube video: Learning The Parts Of A Computer			
Exploration	Hands on Learning			
	Today you will label the parts of a computer. Your job is to download the attached document and label the external parts of a computer.			
	Students are to download the attached document and then label the external parts of a computer in the appropriate blanks. I will allow students to watch the video <u>Types of Hardware</u> as an open note resource before assessment. Students will take a picture of this activity and then submit for evaluation. Guided Practice: <u>This assignment will not count as a grade. Practice</u> ONLY.			
	External Computer Parts document download Practice Sheet			
	External Computer Parts   Image: Computer P			

E	Information and Description
	<ul> <li>Example Activity:</li> <li>When students are finished with this practice activity, they will distribute their papers to peers for evaluation and practice grading.</li> </ul>
	<b>Example Activity 2:</b> <u>Answer Sheet- Teacher Key</u> I will give students the answer key for accurate grading and for a study guide for the graded assignment.
	<b>Activity 2:</b> Students will grade 1 peer's worksheet and then give the paper back to the appropriate student for the final assessment study guide resource.
Explanation	After students have watched the videos; Types of Hardware and Learning the Parts of a Computer: I will share with the students' a digital newsletter presentation that I created from SMORE that has specific content about computer hardware basics and vocabulary words to prepare students for the final exam. This exam consists of 10 true or false questions that will be required to take online through Poll Everywhere platform. The group assessment will require students to divide into groups to hook up all the external components to make the computer work. Students will go to the computer lab and divide into groups and make a video describing the external parts of a computer and what they are used for. Students will pair in groups of two and each person in the group is required to split the requirements to receive full credit. This exercise will help students learn the external parts of a computer.
	Computer Hardware Basics- External Parts Of A Computer.
Elaboration	Individual Project: Infographic Project: Students will create a Piktochart Infographic to illustrate their knowledge to define and identify external components of a computer. Students will use technology skills to show their work.
	Piktochart Infographic example
	Group Assessment: Students make a video project:
	<ul> <li>Make a video to define and describe each external component of the computer.</li> <li>Click &amp; Learn Resource: <u>How Computers Work</u>. Click on Peripherals for practice</li> <li>Students will use this video as a model or added resource to help with this activity. Students must be creative when making this video and must be their own work. DO NOT copy the teacher's video.</li> <li>Teacher made video for an example.</li> </ul>
	<ul> <li>Students naming the external parts of a computer- group work video example:</li> </ul>

E	Information and Description
	https://youtu.be/gROBrBaYU9w
	The group assignment will require students to describe and define internal computer parts. Students will use their knowledge to describe these components that are needed to make the computer work. Students will review the link above, How Computer Work, and then they will create an informative video to educate others about how the computer operates with each of these components learned in the video. Any media resource will be acceptable.
Evaluation	<b>Exploration Formative Assessment</b> : True of False Quiz to recall the external parts of a computer. Students' have one hour to take this quiz. The quiz has to be taken in a one time, one sitting attempt.
	Poll Everywhere Original Site: Poll Everywhere Response Assessment
	Engagement Formative Assessment: Kahoot Game: <u>Learning External Computer Hardware Basics- Looking outside of a Computer.</u>
	These assessments are to help me evaluate the students' outcome of this lesson. I want to determine if the students' understand the content and have mastered the materials taught.
	Elaboration Rubric:
	Individual Project: Infographic Project Rubric Rubric:
	<u>Group Project Video Rubric</u> <u>Rubric:</u>
	For accurate grading, Rubrics will be used as a guide to determine if students followed directions, and to determine if they understand materials and what is expected from them.
	Rubrics were created from Rubistar

# References

Blogger (2012). Blogspot. Computer Hardware Pro and Solutions. [Pintrest]. Retrieved from http://cwpakistani.blogspot.com/2012/05/if-you-use-desktop-computer-youmight.html? epik=dj0yJnU9QWNkcIE0QXFwRII0RIFmSE5pNTJpdFVvX1F6NzE5UXAmcD0wJm49 cGRxQXY4bDRxSVNYY2V6RzdWM0xkdyZ0PUFBQUFBR0FZU3NR

- Trine. Parts Is Parts Hardware Descriptions and Upgrades. Retrieved from <u>http://trine2.net.au/computer-hware-peripherals/parts\_with\_wizard\_intro\_external1a.</u> <u>htm</u>
- BHM (2020). Make It Easy Education. Types of Hardware/ Internal Hardware/External Hardware. [YouTube] Video. Retrieved from <u>https://www.youtube.com/watch?</u> <u>app=desktop&v=SSnNY8GfZig</u>
- Learning The Parts of A Computer. [PDF]. Retrieved from https://drive.google.com/file/d/1tX3Yg15p\_biGpEc23ICmf0tJOiwZ5ilB/view
- CCO. Public Domain. Pixabay. Istock. [Images] Retrieved from https://pixabay.com/photos/search/floppy%20disk/
- CCO Public Domain. Pixy. Computer Mouse Device White Black Drawing. [Image] Retrieved from <u>https://pixy.org/102505/</u>
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- CCO. Public Domain. Pixy. HP LaserJet Printer, Copier, Scanner, 90 Days Warranty. [Image] Retrieved from <u>https://pixy.org/5563082/</u>
- CCO. Wikimedia Commons. Genelec 6010A & 5040A. Speakers [Image]. Retrieved from https://commons.wikimedia.org/wiki/File:Genelec\_6010A\_%26\_5040A.jpg

#### Section 2

Name the file with your last name and first initial (example: HocuttM) and submit by attaching in Blackboard assignment for 5E Lesson Plan Ideas and Assessment.