Keyboard Design

Introduction:

Computers come in all shapes and sizes. Some of the combinations of hardware (physical parts of a computer) and software (the programs or instructions that tell a computer what to do) work well together and can help someone with their school work and job. Others have such a great sounding price that they are hard to pass up only to turn out to be a waste of money.

One of the best ways to get a quality computer for a good price is to have a computer technician build the computer for you. This gives you control over what components are added to the computer so that they are within your monetary budget and work together to help with the tasks that you want to do on your computer.
For example, if you want a computer that can help you create high resolution graphics (detailed drawings and pictures) you will need a more powerful and expensive central processor unit or CPU (the brain of the computer) and graphics card (an electronic circuit card that helps display video images). If you buy a computer with a cheap CPU and graphics card, you will be frustrated with the slowness of the computer.

In order to speak the language of Computer Geek one does not have to become a computer geek. However, by knowing what the Input parts of a computer are and how they function together, one can help a computer builder choose appropriate parts that you would like to have put combined for a computer own and operate comfortably. This activity will help you get started toward that goal.

Most people use the QWERTY keyboard layout and it still works, but there are many ways it could work better.

**Task:**

The task ahead is to find the keyboard needed to complete your desktop computer that will help you while studying for school by Research several keyboard design layouts including the QWERTY. Based on the result of your information, design and create your own keyboard layout.

You will need to stay within specific Web pages. You may not buy a predesigned computer keyboard. In addition you will write a short paper explaining why you chose your keyboard design for your new computer and how they will help you in school.

In order to understand how computer keyboards work it is necessary to continue reading and learning about the Input parts of a computer. These parts and their functions are described in the Web pages below. While learning about the parts of a computer and how they are used, you will also gain knowledge about which kinds of parts would be best for your own personal keyboard.

In this project we will be designing a computer keyboard from any available material for keys and the outline of the keyboard itself. Let your imagination be your guide. Remember this is only a theoretical model and the keyboard should work in theory only.

**Process:**
Compare each design (at least 3) to the QWERTY Keyboard design. In this section, the teacher leads the student through the task. The teacher offers advice on how to manage time, collect data, and provides strategies for working in group situations.

Resources:
You may use the following websites or information. Compare each design to the QWERTY Keyboard design.
http://www.webopedia.com/TERM/Q/key.html
http://www.webopedia.com/TERM/Q/keyboard.html
http://ergo.human.cornell.edu/ah tutorials/ckd.htm
http://www.artlebedev.com/everything/optimus/
http://universalusability.com/access_by_design/fundamentals/keyboard.html
http://www.jsi.org/volumes/volume1/issue1/articles/boone.html
http://steampunkworkshop.com/keyboard.shtml

Evaluation:
Present a model of your keyboard design to the class and disclose your findings.

Conclusion:
Final Analysis: Which design worked better for you?

Project Details:
Must contain a picture of each design along with a design model identifying the IBO Design Cycle with a detailed description.

This Web Quest is available at www.teach-nology.com