

## UA Gateway Unit Planning Guide

### Individual Lesson Plans

Teacher: Tymond Tran

Course: Design and Technology 1

School Year: 2011-2012

**Unit:**

**Lesson:**

### Learning Goals:

1. I can identify and describe the functions of the 7 categories of computers.
2. I can list devices and examples of functions for each of the categories of computers.

### Vocabulary:

Personal Computers (PC), Mobile Computers, Mobile Devices, Game Consoles, Embedded Computers, Laptops, Tablets, Subnotebook Computers, Wearable Computers, Servers, Mainframe Computers and Super Computers.

### Starter\* (Building on Background Knowledge):

Identify the category of computers that would host the following websites or services; and describe why.

Jupitergrades.com

Google.com (All the services, Earth, Maps etc.)

An ATM Machine

Halo Tournament

**Motivation:** Years ago as I was learning website design I kept hearing that no one can see your website unless its on a webserver. Initially, I had no clue what they were talking about. I knew servers as people in restaurants that served food, but not as anything else. After completing the course I started telling my friends and family that I now knew how to make websites. A friend of mine came to me and told me that her dad wanted a website created for his business and that he was willing to pay me up to \$500 dollars to do it. I was really excited. I was still in high school and that was a lot of money, and meant tons of new clothes and gadgets etc. I met with her dad, and he told me what he wanted, and that he needed his websites to show up first on search engines. Puzzled in my mind, I had no clue what he was talking about. I figured, I was just going to be making this website and giving it to him, and that would be it. He then started baffling off about, server hosting space, URL's and a bunch of other computer jargon. I was confused. Still thinking about the money I just nodded and went ahead with what he was saying. After he left, I sat there startled, with no clue as to what to do.

\* Indicates a formative assessment.

With this funny situation in mind, why do you think it is important for us to know about the categories of computers? If we were to come up with a question that would cover what you think today's lesson is going to cover; **What would that Question be?**

**Mini-Lesson (“I do”):**

**Say:** Yesterday we answered several questions about four categories of computers. What were those four categories?

**Question:** Reflecting back on our starter activity, **What category would each of the services/websites fall under? Number 1, number 2....**

**Jupitergrades.com** – Website Server, it allows multiple users to connect to it.

**Google.com (All the services, Earth, Maps etc.)** - Super Computer because it allows for thousands of users and it used for scientific information etc.

**An ATM Machine** – Mainframe Computer - Sends financial data to and from the device

**Halo Tournament** – Video Game Console – allows the user to play in a video game tournament.

**Say:** Today we are going to try a new and exciting way of reviewing the information that we covered this week, in preparation for tomorrow's quiz. Each person will receive a handout that contains the chart we created this week; with the additional columns of functions, and examples. In order to complete this chart we, are going to break up into groups, and take turns filling in the information for each category. The way this will look is as follows.

**Models with Co-Teachers**

1. **Each person receives their handout and fills in their name and class period on the top of the sheet.**
2. **The teacher instructs the class that they have 3 minutes to fill in the information for the 1<sup>st</sup> category, beginning with their name on the outside of the first column.**
3. **After 3 minutes the teacher tells students to stop, and place their pens and pencils down.**
4. **The teacher then instructs the students to switch their papers with the student to their right.**
5. **Students are then prompted to write their name to the left of the second column and fill in the information for the second category in 3 minutes. (Repeat this step each time they are prompted to do so by teacher until all categories are completed.)**
6. **Some students will fill out more than one category per sheet; which is fine.**
7. **When all categories are complete, handouts go back to the original holder who then reviews it for 1 minute and make any last minute adjustments.**
8. **Share Out.**

**Guided Practice (“We do”):**

Teacher and students model the first go around.

**Independent Practice (“You do”):**

Students complete activity in their groups.

\* Indicates a formative assessment.

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### **Share/Summary:**

Ask students to share out the examples and functions listed on their handouts for each category.

### **Exit Task\*:**

Students make corrections to charts, and fill in any missing information.

### **Homework:**

Study chart for tomorrows quiz.

\* Indicates a formative assessment.