Animal Tlatoque: Encouraging Minorities to Study Computer Science

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Women and Latina/os as Minorities

- Latina/os and women are underrepresented in Computer Science
- Females earn only 15% of CS degrees
- Latina/os earn only 7% of CS degrees (Latina/os are 14% of the population)
- Lack of interest among females
- Lack of preparation for degree

Figure 8. Most Popular Engineering Disciplines at the Bachelor's Level, with Enrollments by Category, 2000

Source: CPST, data derived from EWC
Women and Latina/os as Minorities

- Designers represent customers: better products
- Lucrative field: opportunity for financial progress
- Female Computer Scientists make a much larger portion (87.3%) of men’s earnings than women do in other fields

Creating a Summer Program

- Endangered Species and Mesoamerican theme
- Teach Scratch Children’s Language and HTML
- eVoices Online Virtual World
- Survey interest and skill level
- Develop a program that can be adapted to other areas
Designing a Virtual Environment
Learning Scratch
Creating Scratch Tutorials

Making a Second Sprite
You have your first Sprite done, so let’s practice making another sprite and then we’ll add something new!

Now make a new Sprite.

Use the file folder to find a picture of food. Name this Sprite "Diet"—this Sprite will inform the user of your program about your animal’s diet!

Insert a "When Start Clicked" block to the Scripts display. Each Sprite has its own script! Remember that a script is the sequential list of instructions that a Sprite will follow; each Sprite has its own list of instructions.

Next, add a think block to the "When Start Clicked" block. Change the text to "What I eat."

The Start to a Script
There are several ways you can start a script. "When Start Clicked" is only one way to start a script. The other three ways are "when____ key pressed", "when Sprite clicked" and "when I receive____". We will cover only some of these, but I invite you to explore how the rest of these work on your own.

Choose the "When Diet clicked" block and drag it to the Scripts display. You will notice that this block cannot be attached to the other three blocks. This is because the "When Diet Clicked" block starts a new script—a different set of instructions will happen when the Diet Sprite is clicked. Notice that the four script starting blocks have the same shape.

Timed Blocks
There are blocks that are in effect for only a certain time. Let’s take a look at these.

Choose and drag the "stay for ____ seconds" block to the "When Diet clicked" script. Change the text to...
eVoices Website: Prototype
eVoices Website: Current
eVoices Website: Future
Virtual Environment
Themed Games
XHTML Tutorials
Tour through eVoices

- www.cs.ucsb.edu/~sarahejones/bpc/
Next Steps

My Work

- Finish virtual environment design and development, games, and XHTML tutorials

Next Summer

- Recruit for Summer 2010
- Survey students and analyze their progress to find whether the incorporation of cultural topics is an effect means to interest girls and Latina/os to study Computer Science
- Expand student pool and bring eVoices to other regions
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