

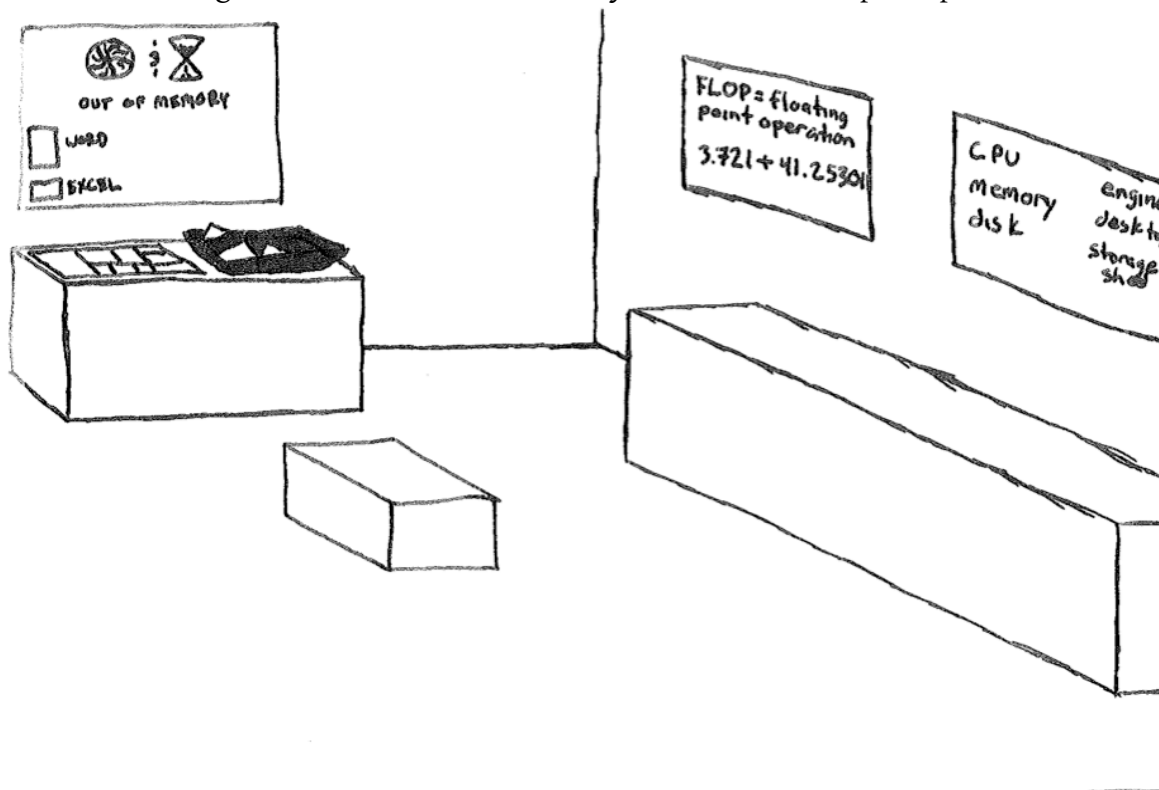
## Module 4: Learning with objects

The screens portion of the exhibit will be situated above a customer-facing counter surface, behind which technicians stand to help customers (such as is seen at the Genius Bar in Apple retail stores). In order to be visible from an adequate distance, the screens will measure 46-55" diagonally. On the screens, customers will see a changing slide show of computer parts, terms, and concepts.

The physical portion of the exhibit will feature colored squares of different sizes (probably made of wood or plastic, perhaps with application icons on them), a tray that can accommodate some of them ("memory") and a large bin that easily holds all of them with room to spare ("storage"). These items will be presented on a table to the side of the space, and there will be posters (or screens) that step the visitor through what a 'spinning rainbow wheel' or 'hourglass' icon means, first in technical terms (representing the *iowait* operation for paging to disk), and then in simplified terms (*iowait* means 'input/output wait', which means the computer is waiting on the storage device to move data out of memory and store it on disk). Then, there will be a key for the visitor to refer to as s/he:

- sees that the 'memory' tray is nearly full of data blocks
- decides which blocks are not being used and places them, one at a time, into the 'storage' to make room for a new data block
- performs the above operation again to switch between applications

The learning in this exhibit will take place both in watching the screens and participating in the memory/storage demonstration. It's self-guided, and the screens should prompt the visitors to try out the memory/storage demonstration to gain a kinesthetic understanding of what computers do when they run low on memory. Both the screens and the installation should help novice visitors to understand or at least gain confidence and familiarity with various computer parts and terminology.



SKETCH OF INSTALLATION AND SCREENS.