Developing an Interactive Training Tool for the METI
H. P. S.
The METI HPS

- Human patient simulator
  - Computer driven mannequin
  - Lifelike characteristics
    - Blinks
    - Speaks
    - Breathes
    - Heartbeat/pulse
  - Mirrors human responses to procedures
  - Has programming for human like systems

*all info from METI’s website*
Reason For Project

- The project was for Union’s School of Nursing for the following reason:
  - Many of the faculty need to know what the HPS is, what it can do, and how to use it.
What Was The Objective?

- Come up with an easy to use interactive tutorial module to familiarize the faculty on different aspects of the HPS.
What Does The Tutorial Cover?

- The tutorial contains three major sections
  - Overview on the HPS.
  - Startup and shutdown procedures (which can be tricky).
  - An introduction to METI’s proprietary software and its corresponding curriculum, the PNCI.
  - All are accessible from a main menu.
What Does The Tutorial Cover?

- I also added a little quiz.
  - It uses the code on the following slide to evaluate the answer
Code for quiz

//Button A
A.onRelease=function() {
    incorrect();
}

//Button B
B.onRelease=function() {
    incorrect();
}

//Button C
C.onRelease=function() {
    incorrect();
}

//Button D
D.onRelease=function() {
    correct();
}

//Button E
E.onRelease=function() {
    incorrect();
}

//Call for button on correct answer
correct = function() {
    Answer.text="Correct";
}

//Call for button on incorrect answer
incorrect = function() {
    Answer.text = "Incorrect";
}
How Were The Goals Accomplished?

- The intro is a brief video of the HPS with the school’s clinical lab specialist as the narrator.
- The startup and shutdown procedures are an integration of audio and pictures.
- The intro to the PNCI is a breakdown of a simulation model with the major sections isolated and highlighted with captions.
How Were The Goals Accomplished?

- Macromedia Flash was used to put together all of the mediums (the audio, video, and pictures) and is controlled by action script.
A Few Screenshots
What are the life-like features of the HPS? Please choose the best answer.

Correct

A. Lung Sounds
B. Pulse/Heartbeat
C. Exchangable Genitalia
D. IV Medication Response
E. All of the Above
Now For A Brief Demonstration
Problems Encountered

- Budget (as cheap as possible)
- Time (individuals’ schedules, clinical schedule, etc.)
- Equipment
  - Had to obtain video camera, audio recorder, and digital camera.
Technical Difficulties

- Had to learn Flash and action script.
- Problems with media importation.
  - Combination of audio, video, and pictures kept Flash from publishing the flash movie.
What I have learned

- About a practical, important use of computers driven technology.
- How to use Flash and action script
- How to work with people for a common goal using computers.
Future

- More can be added to the module.
- With modifications the module can be put online.
- Perhaps another senior project?
Summary

- Union’s School of Nursing needed a tutorial on the computer driven METI Human Patient Simulator.
- Interactive Flash module produced with audio, video, pictures, and the breakdown of a curriculum and simulation guide.
Credits

- Information on the HPS from METI’s website and published resources.
- Mrs. Christie Pawley
  - Faculty representative and instructor.
- Mrs. Beckie Kossick
  - Union’s SON Clinical Simulation Specialist.
- Chris Johnson
  - A Union IT Specialist who helps with the HPS.
- Dr. Kirk for moral support and guidance
- Ben Bailey