

College of Education Vision Award Proposal  
Using PDAs for Fitness Testing

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1. Need and Rationale

- a. When our students conduct fitness tests, they first write all of the data down on a sheet of paper. They then go to the computer to enter the results and print out a report. Entering the data into a PDA instead of onto paper would save a step and eliminate recording errors.
- b. Some of the tests our students conduct, like the posture analysis, are qualitative and not quantitative. Based on the results the student then summarizes the results and recommends specific exercises. Currently, these tests are not computerized at all. If the analysis was entered directly into a PDA, a summary and recommended exercise program could quickly be generated.
- c. If an instructor in any of our PED activity classes wants to do any testing in class they typically just write the information on a piece of paper and give the student their results. With a PDA fitness testing program, nice reports could be generated, data stored, classes averages determined, and pre-post test results and reports easily generated.

2. Goals and Objectives

- a. To eliminate paper and pencil from fitness testing.
- b. To use PDAs to collect individual test data, to transfer this data to a secure data base, to be able to retrieve this information, to be able to do pre-post comparisons, and to be able to print this data.
- c. To use PDAs for conducting Posture and Movement screens. To be able to record the individual results and then automatically generate recommended programs based on the results.

3. Audience for the Product

- a. Students in KIN 352K Diagnosis and Fitness class for use in their learning how to conduct fitness evaluations. This is about 90 students/year.
- b. Students doing fieldwork in the Fitness Institute of Texas would use this to do testing. This is about 25 KHE students conducting about 800 fitness tests/year on UT students.
- c. Instructors in our PED 106C classes.
- d. This could have commercial possibilities as anyone who conducts fitness tests could use it.

4. Description of Resources Already in Place

- a. All the recording forms.
- b. All the equations necessary to generate results.
- c. All of the recommended programs.

- d. A web based system using Cold Fusion and Access for data entry, data storage, and results generation.
5. Description of Activities Necessary
    - a. Analyze the current desk top web based system that has been developed by FIT and figure out how best to interact with this system. The results from this will have an impact on how to proceed.
    - b. Depending upon the results of “a” above, I think the best way to do this project is to start with one test, for example body composition. The data entry form and data base for skinfolds and bioelectrical machines would be developed. Then the ability to generate a body composition report would be completed. Once we were successful with one test, we would go on to the next test. Once we were successful with all of the tests, we would bring them altogether.
    - c. This project will be almost entirely a computer programming project.
  6. Description of How the Project Will Be Sustained
    - a. My classes and students will be using this program on a daily basis. If it is successful as I anticipate, as I will use funds from the Fitness Institute of Texas as needed to sustain it.