EQUIPMENT NEEDS ASSESSMENT APPLICATION

Name of Person Submitting Request:	Mark Ikeda
Program or Service Area:	Biology
Division:	Science
Date of Last Program Efficacy:	Spring 2009
What rating was given?	Expansion
Equipment Requested	Vernier Computer Interfaces
Amount Requested:	\$1549.99
Strategic Initiatives Addressed:	Student Success, Technology

1. Provide a rationale for your request.

Increasingly the move to acquaint students with the use and interpretation of physiological data generated by computerized equipment has been the direction of nursing programs and prenursing preparation courses. The advantages of these transitions are multifaceted but include; a) a record of quantitative data representing many human physiological characteristics, b) data that can be exported for further analysis by a small group or an entire class, c) data that will facilitate comparisons among groups of tested individuals, d) increasing student familiarity with interpreting data shares the characteristics that they will encounter in clinical or research settings.

2. Indicate how the content of the latest Program Efficacy Report and/or most current EIS data support this request. How is the request tied to program planning? (Reference the page number(s) where the information can be found on Program Efficacy.)

The courses that would use these items would primarily be the following; Bio 155, 250, 251 and 261. Data derived from the from EIS Science Division summary sheets for academic years '10-'11,'11-'12, and Fall of '12 indicates annual enrollments in the biology courses listed above averages approximately 685 students.

The 2009 Program Efficacy document (p7 Allied Health Prep # of students) illustrates the high percentage fill rate for Allied Health Prep Program and large numbers of enrolling students in the courses listed above.

The laboratory CORs for Bio 250 and 251 explicitly state the requirement that students become familiarized with the "Utilizing... computers and electronic technology to examine various body systems".

- 3. Indicate if there is additional information you wish the committee to consider (for example: regulatory information, compliance, updated efficiency and/or student success data or planning etc).
- 4. Evaluation of initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources. (for example Department Budget, VTEA or Perkins)

The initial costs will provide equipment that will be used to detect heart function and muscle action and also include software and hardware to store the data and analyze the data. There are no other sources of funds available to the Department to purchase this equipment.

- 5. What are the consequences of not funding this equipment?
- a) Time spent waiting for access to equipment for performing physiological measurements due to small number of functional units, b) less exposure to modern physiological measuring equipment, c) a breach of key elements of certain course CORs.