



# Why Use Technology?

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## PURPOSES

This poster explores the use and implementation of current technology (i.e., Personal Digital Assistant (PDA) or handheld computers, pedometers, heart rate monitors, sun intensity monitors, digital cameras, digital video cameras, the Internet). The topics that will be explained include time management, data collection, record keeping, equipment tracking and organizing, video clips, Internet, grading, and assessment. Using current technology to compliment instruction, the faculty is working on some of the Kinesiology program goals, such as, accomplishing technology standards for three different accreditation bodies and state standards, making the undergraduate students aware of new technology, and aiding students to be competitive in their profession.

With the main purpose of the Kinesiology programs being to prepare students for a promising career, then it is the faculty's job to introduce the undergraduate students to technology which could keep them viable in their profession. In the process of acquiring and maintaining accreditation through National Association of Sport and Physical Education (NASPE), National Council for Accreditation of Teacher Education (NCATE), and Commission on Accreditation of Athletic Training Education (CAATE) many technology standards were identified that the Kinesiology undergraduate students need to meet. The most recent type of technology that the undergraduate students and faculty in the Kinesiology department have been given the opportunity to use through the benefits of a faculty grant is a PDA. The flexibility and mobility of PDAs have benefited the undergraduate students more since they function in unconventional work environments (e.g., gymnasium, football field, athletic training room, basketball court, clinic).

## TYPES OF TECHNOLOGY USED IN KINESIOLOGY

- Computers and computer software (e.g., Word®, PowerPoint®, Excel®, Publisher®)
- Digital Cameras
- Digital Heat Index
- Digital Video Cameras
- Digital Weight and Body Fat Scales
- Discussion Boards, chat rooms, electronic library databases
- Electrical stimulation machines
- Electronic Portfolio
- EMG machines
- Heart Rate Monitors
- Internet
- Music storage devices (e.g., iPod®)
- Pedometers
- Personal Digital Assistant (PDA) or handheld computers
- Sun Intensity (UV rays) Monitors
- Ultrasound machines
- WebCT/Blackboard



## HOW TECHNOLOGY IS USED IN KINESIOLOGY

### Accessing the Internet

- Students can view websites, blogs, discussion groups, and listserv for their profession
- Students can search for research data, resources, pictures, and videos

### Advising

- Students can use PDA's to register for courses as they are being advised
- Students can send, download, view, and maintain their degree plans
- Students can download or view their transcripts

### Archive or store data

- Students and faculty can store documents, presentations, research, pictures, video clips, and music
- Students can store food journals, picture food journals, diet and weight loss plans or goals
- Students and faculty can store athlete insurance and emergency contact information on a PDA rather than paper format
- Students and faculty can store injury reports, rehab charts, and treatment records on a PDA. The PDA can then be synced to the main system upon return to the athletic training room.
- Students can store weight charts to track athletes' pre and post practice weights during 2-a-day practices for hydration monitoring

### Assessing student performance and grading

- Students can assess concussions and keep an athlete's pre-test scores available on the side-lines
- Students and faculty can perform instructor, peer and self-assessments of clinical skills
- Faculty can assess students' clinical performance
- Students assessment of experience at clinical sites and assessment of clinical instructor
- Students can view video clips of performances to analyze and determine what changes need to be made
- Students can track their progress on their program goals and objectives

## HOW TECHNOLOGY IS USED IN KINESIOLOGY CONTINUED

### Communication

- Students can share and receive information from others

### Data collection

- Students can take measurements and then enter the measurements directly into the PDA
- Students can collect professional and research data
- Students can document survey data to perform basic analysis and graphing on the data
- Students can gather practice and game stats

### Time management

- Students can use PDAs at clinical sites, on the field, or on the road when traveling to increase their mobility
- Students can complete assessments using a PDA, then sync them to a computer rather than hand transferring the data into the computer

### Development of programs, plans, and logs

- Students can develop, track, and maintain rehab programs for athletes, lesson plans, and practice plans using a computer or PDA
- Students can develop and track food and physical activity logs
- Students can develop, track, and maintain athlete or client conditioning and training protocols

### Equipment ordering, tracking, and organizing

- Faculty can enter inventory directly onto a PDA, then sync it to their computers
- Faculty can document, store, and locate equipment that has been checked out to students
- Faculty can order new equipment
- Faculty can organize equipment rooms by posting digital pictures of the equipment on the shelves for easy and correct placement of equipment
- Faculty can maintain an updated equipment inventory

### Facility and equipment safety check and maintenance

- Students and faculty can record and maintain safety and maintenance checks on facilities and equipment
- Faculty can record and maintain documentation of cleaning of facilities and equipment

### Instructor, course, and peer evaluations

- Students can use PDAs to complete course and instructor evaluations at the end of the semester
- Students can use PDAs to complete peer evaluations during class

### Maintain a calendar of events or schedules

- Students can maintain a semester calendar that includes class schedules, assignment due dates, other academic-related deadlines, extracurricular activities, personal work schedule, etc.

### Monitoring weather conditions and storms

- Students and faculty can monitor sun intensity (UV rays) and heat indexes
- Students and faculty can track storm warnings and watches

### Viewing and listening to documents, PowerPoint presentations, pictures, video clips, and music

- Students and faculty can use digital pictures for completing postural analyses
- Students can use pictures of injuries to participant in problem based learning
- Students can view important documents or PowerPoint presentations during class instead of waiting until after class
- Students can view pictures or video clips of surgeries, injuries, motor patterns, and sports specific techniques
- Students can listen or use music in their lessons

## TIPS FOR SETTING UP & USING TECHNOLOGY IN KINESIOLOGY

- Address security and safe guards for each student's information and data
- Address to the students that there might be viewing difficulties with the PDAs' smaller screen, which might distort or hinder the viewing of certain documents or websites
- Develop a back-up plan for all technology, especially for broken, lost, or damaged technology
- Develop a damaged or lost equipment policy (e.g., students sign a technology agreement to replace damaged or lost equipment)
- Decrease intimidating, overwhelming, and uncomfortable feelings that some students and instructors feel when using new technology by asking questions and setting up individual time for instruction
- Decrease the learning curve for the use of new technology by starting out with simple uses first
- Determine and find the appropriate accessories for new technology
- Keep students on task and oversee that students are on task while using the technology
- Maintain and provide maintenance of hardware and software
- Obtain the proper technology for your needs – do your research
- Provide enough technology (e.g., PDAs, pedometers, heart rate monitors) for all students to use
- Set up forms, assignments, and assessments into an electronic format before the semester starts
- Sustain hardware and software compatibility