The Self-Reporting Technology Skills Inventory: Anticipating PC and PPC Training Needs

Divided into four parts, presenters will describe (1) the process of skill specification for personal computers (PCs) and pocket personal computers (PPCs/handhelds), (2) the construction of skills inventories for PCs and PPCs, (3) the use of inventory data to plan curricula, and (4) the use of defined skills as a basis for lesson, course, and program assessment.

Skill Specification
The process of skill specification involves carefully defining what skills are necessary to successfully use both the operating system of the PC as well as the various software applications. Presenters will discuss construction of the skill statements used for the two inventories and will enable those in attendance to create their own skill statements.

Skills Inventories
A five-point response scale was combined with each skill to yield a series of skill items to which respondents indicated their skill level. The response continuum of “Extremely Competent,” “Very Competent,” “Competent,” “Minimally Competent,” and “Not At All Competent,” was used for each skill statement in the PC Inventory and the PPC Inventory. Presenters will share these inventories and discuss their strengths and weaknesses.

Use of Inventory Data
Skill inventory data clearly showed what skill-training students need and what they do not need. Rather than dwell on what students are able to do, this information enables faculty to stretch students beyond their present levels. Presenters will share data and illustrate how it leads to curriculum development. As the technology skills of entering students change, periodic assessment of their capabilities will lead to an ever-changing course to impart necessary skills.

Lesson, Course, and Program Assessment
Once skills have been specified, students can self-report their own level on various skills before the technology course begins and at the end of the course. This triangulated with actual demonstration of the skills constitutes powerful lesson, course, and program assessment data.