# Instrumentation & Measures

Polk State College

Innov8 Academy

# Appendix A.3 Technology Self-Reporting Skills and Efficacy (TSSE)

## Computer Technology Integration Survey

Directions: The purpose of this survey is to determine how you feel about integrating technology into classroom teaching after your participation in the 2013/14 Innov8 Academy. Please select the response to each survey item that matches your current perceptions the most.

## Please enter your first and last name.

**First Name:**

**Last Name:**

## Using the above as baseline, please select one response for each of the statements in the table:

| | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |
|---|---|---|---|---|---|
| **1. I feel confident that I understand computer capabilities well enough to maximize them in my classroom.** | | | | | |
| **2. I feel confident that I have the skills necessary to use the computer for instruction.** | | | | | |
| **3. I feel confident that I can successfully teach relevant subject content with appropriate use of technology.** | | | | | |
| **4. I feel confident in my ability to evaluate software for teaching and learning.** | | | | | |
| **5. I feel confident that I can use correct computer terminology when directing my student's computer use.** | | | | | |

| | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |
|---|---|---|---|---|---|
| 6. I feel confident I can help students learn when they have difficulty with the computer. | | | | | |
| 7. I feel confident I can effectively monitor students' computer use for project development in my classroom. | | | | | |
| 8. I feel confident that I can motivate my students to participate in technology-based projects. | | | | | |
| 9. I feel confident I can mentor students in appropriate uses of technology. | | | | | |
| 10. I feel confident I can consistently use educational technology in effective ways. | | | | | |
| 11. I feel confident I can provide individual feedback to students during technology use. | | | | | |
| 12. I feel confident I can regularly incorporate technology into my lessons, when appropriate to student learning. | | | | | |
| 13. I feel confident about selecting appropriate technology for instruction based on curriculum standards. | | | | | |
| 14. I feel confident about assigning and grading technology-based projects. | | | | | |

| | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |
|---|---|---|---|---|---|
| **15. I feel confident about keeping curricular goals and technology use in mind when selecting an ideal way to assess student learning.** | | | | | |
| **16. I feel confident about using technology resources (such as spreadsheets, electronic portfolios, etc.) to collect and analyze data from students tests and products to improve instructional practices.** | | | | | |
| **17. I feel confident that I will be comfortable using technology in my teaching.** | | | | | |
| **18. I feel confident that I can be responsive to students' needs during computer use.** | | | | | |
| **19. I feel confident that, as time goes by, my ability to address my students' technology needs will continue to improve.** | | | | | |
| **20. I feel confident that I can develop creative ways to cope with system constraints (such as budget cuts on technology facilities) and continue to teach effectively with technology.** | | | | | |
| **21. I feel confident that I can carry out technology-based projects even when I am opposed by skeptical colleagues.** | | | | | |

1. Faculty demonstrate a sound or in-depth understanding of the technology operations and concepts.

## A. I select appropriate technology tools (resources).

| | | | | |
|---|---|---|---|---|
| **I always consider current research/evaluations on media (technology tools) before using them in my classroom.** | **I often look at the current research/evaluations on the media (technology tools) before using them in my classroom.** | **I consult other teachers about evaluation information for the media (technology tools) before using them in my classroom.** | **I occasionally refer to research or consult other teachers to find information about the media (technology tools) before using them in my classroom.** | **I usually do not attempt to review current research nor consult others about media evaluation before using it in my classroom.** |
| | | | | |

## B. I have knowledge and understanding of the carious capabilities of technology.

| | | | | |
|---|---|---|---|---|
| **I consistently use Internet, WWW, E-mail, and other technologies to help learners link to information resources, for effective communication, and to help learners visualize problems and solutions** | **I often use Internet, WWW, E-mail, and other technologies to help learners link to information resources, for effective communication, and to help learners visualize problems and solutions.** | **I sometimes use Internet, WWW, E-mail, and other technologies to help learners link to information resources, for effective communication, and to help learners visualize problems and solutions.** | **I seldom use Internet, WWW, E-mail, and other technologies to help learners link to information resources, for effective communication, and to help learners visualize problems and solutions.** | **I do not use Internet, WWW, E-mail, and other technologies in the classroom.** |
| | | | | |

## C. I have skills related to the use of various productivity and management software.

| | | | | |
|---|---|---|---|---|
| **I can create my own Web pages, multimedia presentation (e.g., PowerPoint, Hyperstudio, Prezi), handouts and I use authoring software.** | **I am able to effectively use and manage my Website and can create my own multimedia presentations.** | **I can create multimedia presentation like PowerPoint and I am familiar with Web authoring software.** | **I typically have support to create and manage my Website as well as to create multimedia presentations.** | **I do not have my own Website nor do I feel comfortable creating any multimedia presentations.** |
| | | | | |

## D. I have skills related to the use of course management tools for Web-based learning.

| | | | | |
|---|---|---|---|---|
| **I have used an online course management system (e.g., Blackboard, WebCT, PAL) for Web-based learning several times.** | **I have effectively used an online course management system (e.g., Blackboard, WebCT, PAL) to teach a Web-based class.** | **I have used online course management software (e.g., Blackboard, WebCT, PAL) in support of a traditional course.** | **I have seldom used any kind of online course management software for Web-based teaching or support traditional courses.** | **I am familiar with online course management software for Wed-based learning but have not used any so far.** |
| | | | | |

2. Faculty integrate technology in planning and designing learning environments and experiences (Faculty plan, design, and model effective learning environments and multiple experiences supported by technology).

## A. I design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.

| | | | | |
|---|---|---|---|---|
| **I have created a collection of project-based instructional units modeling appropriate uses of technology. I also model strategies to support diverse needs of learners including the use of adaptive and assistive technologies.** | **I have had support to create a collection of project-based instructional units modeling appropriate uses of technology. I also model strategies to support diverse needs of learners including the use of adaptive and assistive technologies.** | **I have uses multiple technologies (e.g., computer, video, audio, projectors) to implement different instructional strategies and to support diverse needs of learners.** | **I always attempt to arrange equitable access to technology resources that enable learners to engage successfully in learning activities across subject/content area and grade levels.** | **I am aware of some technology resources and strategies to support the diverse needs of learners but rarely use them in my classroom.** |
| | | | | |

## B. I apply current research on teaching and learning with technology when planning learning environments and experiences.

| | | | | |
|---|---|---|---|---|
| **I regularly conduct my own research on teaching and learning with technology when planning and implementing learning environments and experiences.** | **I usually model strategies reflecting current research on teaching and learning with technology when planning learning environments and experiences.** | **I often engage in ongoing planning of lesson sequences that integrate technology resources.** | **Sometimes I refer to current research as well as personal experiences with teaching and learning with technology when planning learning environments and experiences.** | **I try to stay abreast of the current research on teaching and learning with technology when planning learning environments and experiences.** |
| | | | | |

## C. I identify and locate technology resources and evaluate them for accuracy and suitability.

| | | | | |
|---|---|---|---|---|
| **I have developed, implemented, and evaluated technology resources (e.g., computer simulations, tutorials, online databases, research articles) aligned with state and/or national content and technology standards.** | **I model integration of technology resources aligned with state and/or national content and suitability technology standards.** | **I assist the learners as they identify and locate technology resources and evaluate them for accuracy and based on state and/or national content and technology standards.** | **I attempt to make appropriate choices about technology systems, resources, and services that are aligned with national content and technology standards.** | **I typically rely on other sources to help me locate technology resources and evaluate them for accuracy and suitability.** |
| | | | | |

## D. I identify and apply instructional design principles associated with the development of technology resources.

| | | | | |
|---|---|---|---|---|
| **I consistently integrate and apply instructional design principles when I use technology resources.** | **I usually integrate and apply instructional design principles when I use technology resources.** | **I sometimes use instructional design principles when I develop technology resources.** | **I am aware of the instructional design principles associated with the development of technology resources.** | **I am not aware of the instructional design principles associated with the development of technology resources.** |
| | | | | |

## E. I collaborate in planning and designing technology based learning environments.

| | | | | |
|---|---|---|---|---|
| **I regularly participate, collaborate, and sheer with peer faculty members, other institutions and/or students, when I design and develop technology based learning environments.** | **I have been involved in multiple institutional alliances with regard to developing and designing technology based learning environments.** | **I almost always collaborate with peer faculty and/or students when I design or develop technology based learning environments.** | **I often participate in team teaching and sharing technology-related materials with peer faculty members.** | **I seldom participate in team teaching and sharing technology related materials with peer faculty members.** |
| | | | | |

3. Faculty integrate technology in the planning of curriculum (Faculty facilitate, model, design, implement and disseminate curriculum plans that include methods and strategies for applying technology to maximize student learning and also address content standards and student-technology standards).

## A. I integrate technology-enhanced experiences that support use of distance learning environments.

| | | | | |
|---|---|---|---|---|
| **I consistently design, implement, and evaluate methods and strategies that incorporate a wide range of distance learning systems (e.g., video conferencing, web-based) appropriate for my instruction.** | **I regularly incorporate some of the available distance learning systems that are appropriate for my instruction.** | **I sometimes use methods and strategies that support at least one distance learning system in my instruction.** | **I am aware of some methods and strategies that support the use of distance learning systems (e.g., video conferencing, web-based) in my instruction.** | **I do not use distance learning systems (e.g., video conferencing, web-based) in my instruction.** |
| | | | | |

## B. I support curriculum that incorporates integration of technology skills to enhance student learning.

| | | | | |
|---|---|---|---|---|
| **I consistently design, implement and evaluate methods and strategies for teaching concepts and skills that support integration of various productivity tools (e.g., Microsoft Word and PowerPoint spreadsheet) communication tools (e.g., E-mail, listservs, and multimedia tools (e.g., television, audio, graphics, and computer animations).** | **I try to model methods and strategies for teaching concepts and skills that support integration of various productivity tools (e.g., Microsoft Word and PowerPoint spreadsheet) communication tools (e.g., E-mail, listservs, and multimedia tools (e.g., television, audio, graphics, and computer animations).** | **I attempt to implement methods and strategies that support integration of some technology tools from teaching concepts and skills.** | **I am aware of some methods and strategies for teaching concepts and skills that support integration of various productivity tools (e.g., Microsoft Word and PowerPoint spreadsheet) communication tools (e.g., E-mail, listservs, and multimedia tools (e.g., television, audio, graphics, and computer animations).** | **I typically do not use technology tools for teaching concepts and skills.** |
| | | | | |

## C. I integrate technology to address broader and multiple perspectives in the content area.

| | | | | |
|---|---|---|---|---|
| **I consistently use technology to facilitate interdisciplinary learning and to address global issues.** | **I often use technology to facilitate interdisciplinary learning and to address global issues.** | **I sometimes use technology to facilitate interdisciplinary learning and to address global issues.** | **I rarely use technology to facilitate interdisciplinary learning and to address global issues.** | **I typically do not use technology to facilitate interdisciplinary learning and to address global issues.** |
| | | | | |

## D. I integrate technology to develop students' higher order skills and creativity.

| | | | | |
|---|---|---|---|---|
| **I consistently incorporate strategies that require hypermedia development, scripting, and/or computer programming in a problem-solving context.** | **I often incorporate strategies that require hypermedia development, scripting, and/or computer programming in a problem-solving context.** | **I occasionally use methods and strategies for teaching problem-solving principles and skills using technology resources.** | **I am aware of some methods and strategies for teaching problem-solving principles and skills using technology resources.** | **I seldom use technology resources for teaching problem-solving principles and skills.** |
| | | | | |

4. Faculty integrate technology in evaluation and assessment.

## A. I apply technology to assess student learning of subject matter using a variety of assessment techniques.

| | | | | |
|---|---|---|---|---|
| **I consistently develop, implement and assess innovative technology tools/resources (gradebooks, statistical packages, and online rubrics) for assessment and evaluation of student learning.** | **I typically use technology tools/resources to assess student learning of subject matter using a variety of assessment techniques.** | **I assist students in their use of technology resources to collect analyze and interpret results from electronic resources.** | **I am learning about technology resources/tools that I can use to assess student learning.** | **I am not familiar with technology tools/resources that support the assessment and evaluation of student learning of subject matter.** |
| | | | | |

## B. I apply technology to assess instructional practices and maximize student learning.

| | | | | |
|---|---|---|---|---|
| **I consistently use a variety of technology resources to aid in analysis and evaluation of my instructional practices to maximize student learning.** | **I use technology resource to evaluate and improve instructional practices with a focus on maximizing student learning.** | **I implement a variety of instructional grouping strategies that include appropriate embedded assessments for meeting the diverse needs of learners.** | **I occasionally use technology tools to assess my instructional practices.** | **I am vaguely aware of some technology tools that I might use to assess my instructional practices.** |
| | | | | |

**“Bag” Confidence Activity**
**Conducted Pre & Post**

*Activity Description:*

Participants were asked at the orientation day activities and a final assessment meeting to rate their level of confidence (not confident at all, somewhat confident, or very confident) with 17 different technology software, hardware, or application tools. To gather this information, 17 different bags were labeled with the technology and the participants indicated their specific level of confidence on a slip of paper and inserted it into the bag.

# Innov8 Post-Academy Utilization Assessment – 2014

Post Utilization Survey - Innov8 Academy (1st Cohort)

**Introduction** The Innov8 Action Research team is completing follow-up research on your level of use of technology after the first year of Innov8 Academy. Please complete the survey below as we compare pre-data with this data to analyze our results. We appreciate your time in completing this survey!

1. Name

2. Department

3. Campus/Center

4. Extension #

5. Polk email address

**Self-Assessment** Since your participation in Innov8, how often do you use the tools below in your face-to-face and/or online classes? There is no right or wrong answer here. We are simply collecting data on the frequency of utilization of innovative technologies.

| 6. **Traditional Technology Skills** | Current Level of Use | | | | |
|---|---|---|---|---|---|
| | I use this tool almost every day. (1) | I use this tool once or twice a week. (2) | I use this tool once or twice a month. (3) | I use this tool once or twice a semester. (4) | I never use this tool. (5) |
| General Technology Skills (Open and save files, logging in to computers and projectors, etc.) (1) | ❍ | ❍ | ❍ | ❍ | ❍ |
| Lectern Tools (Using the computer and projector in the face to face classrooms) (2) | ❍ | ❍ | ❍ | ❍ | ❍ |

| 7. **PAL Skills** | Current Level of Use | | | | |
|---|---|---|---|---|---|
| | I use this tool almost every day. (1) | I use this tool once or twice a week. (2) | I use this tool once or twice a month. (3) | I use this tool once or twice a semester. (4) | I never use this tool. (5) |
| PAL Content Tool (Editing, viewing, and/or deleting content topics in PAL) (1) | ❍ | ❍ | ❍ | ❍ | ❍ |
| PAL Grades Tool (Editing, viewing, and/or deleting grade items in PAL) (2) | ❍ | ❍ | ❍ | ❍ | ❍ |
| PAL Dropbox Tool (Editing, viewing, and/or deleting dropbox folders in PAL) (3) | ❍ | ❍ | ❍ | ❍ | ❍ |
| PAL Competency Tool (Editing, viewing, and/or deleting learning objectives in PAL) (4) | ❍ | ❍ | ❍ | ❍ | ❍ |
| PAL Rubric Tool (Editing, viewing, and/or deleting rubrics in PAL) (5) | ❍ | ❍ | ❍ | ❍ | ❍ |
| PAL Quiz Tool (Editing, viewing, and/or deleting quizzes in PAL) (6) | ❍ | ❍ | ❍ | ❍ | ❍ |
| PAL Intelligent Agent Tool (Editing, viewing, scheduling, running and/or deleting Intelligent Agents in PAL. Intelligent Agents are tools used to automatically email students when they are unresponsive in PAL.) (7) | ❍ | ❍ | ❍ | ❍ | ❍ |
| PAL Checklist Tool (Editing, viewing, and/or deleting checklists in PAL) (8) | ❍ | ❍ | ❍ | ❍ | ❍ |

| 8. **Software** | Current Level of Use | | | | |
|---|---|---|---|---|---|
| | I use this tool almost every day. (1) | I use this tool once or twice a month. (2) | I use this tool once or twice a month. (3) | I use this tool once or twice a semester. (4) | I never use this tool. (5) |
| Tegrity (Screen capture software for lecturing, modeling, and or updates; how often are videos used in your courses?) (1) | ❍ | ❍ | ❍ | ❍ | ❍ |
| Atomic Learning (Atomic Learning is a website that you and your students have access to that contains tutorial videos on technologies; how frequently do you view or direct students to view these videos?) (2) | ❍ | ❍ | ❍ | ❍ | ❍ |
| Microsoft Office (PowerPoint, Excel, and/or Word) (3) | ❍ | ❍ | ❍ | ❍ | ❍ |

| 9. Mobile Devices | Current Level of Use | | | | |
|---|---|---|---|---|---|
| | I use this tool almost every day. (1) | I use this tool once or twice a week. (2) | I use this tool once or twice a month. (3) | I use this tool once or twice a semester. (4) | I never use this tool. (5) |
| Student Response Systems Student "clickers" (1) | ❍ | ❍ | ❍ | ❍ | ❍ |
| Cell Phones (Mobile Devices used in your classroom) (2) | ❍ | ❍ | ❍ | ❍ | ❍ |
| iPads/Tablets (Mobile Devices used in your classroom) (3) | ❍ | ❍ | ❍ | ❍ | ❍ |

| 10. Miscellaneous | Current Level of Use | | | | |
|---|---|---|---|---|---|
| | I use this tool almost every day. (1) | I use this tool once or twice a week. (2) | I use this tool once or twice a month. (3) | I use this tool once or twice a semester. (4) | I never use this tool. (5) |
| Quality Matters Rubric Adoption (Quality Matters is a rubric you can use in the design of your online course; how often do you reference the quality matters rubric to modify the design of your course?) (1) | ❍ | ❍ | ❍ | ❍ | ❍ |
| Plagiarism (How often do you use innovative tools to address this issue?) (2) | ❍ | ❍ | ❍ | ❍ | ❍ |
| Digital Storytelling (Students use mobile devices (i.e. iPads, cell phones) to record an instructor-guided project, edit the project with the mobile device, and post the story online; how often do you use digital storytelling?) (3) | ❍ | ❍ | ❍ | ❍ | ❍ |

11. Please indicate other tools that you utilize below in your face-to-face and/or online classes and indicate your frequency of use of each tool.

| | Current Level of Use | | | | |
|---|---|---|---|---|---|
| | I use this tool almost every day. (1) | I use this tool once or twice a week. (2) | I use this tool once or twice a month. (3) | I use this tool once or twice a semester. (4) | I never use this tool. (5) |
| 1. (1) | ❍ | ❍ | ❍ | ❍ | ❍ |
| 2. (2) | ❍ | ❍ | ❍ | ❍ | ❍ |
| 3. (3) | ❍ | ❍ | ❍ | ❍ | ❍ |
| 4. (4) | ❍ | ❍ | ❍ | ❍ | ❍ |

**Thank you!** We appreciate your time in completing this survey! If you have any questions, feel free to contact an Innov8 Action Research Team member.

Appendix A.5

# Action Research Evaluation Rubric

Polk State's Action Research Project are evaluated based on the Quality Standards indicated below. The rating for each component should reflect the following scale:

5 = Incorporates all aspects to an excellent extent
4 = Incorporates all aspects to good extent or mixture of good and excellent extent
3 = Incorporates all or nearly all aspects to a fair extent or mixture of fair and good extent
2 = Incorporates many aspects to a fair or good extent but key components are not addressed
1 = Fails to incorporate many aspects and those that are incorporated are of fair or poor quality
0 = Fails to incorporate almost all aspects and those that are incorporated are of poor quality

To arrive at fair and consistent ratings across diverse sets of projects and challenges, reviewers are encouraged to use for their ratings the questions posed in each of the five Quality Standard categories. The comments section is provided for additional explanations or issues associated with each evaluated area.

| Quality Standards | Rating | Comments |
|---|---|---|
| **Problem or question identification and description:**<br>• Was the problem/question well defined?<br>• Was the impact/relevance of the problem clearly identified?<br>• Was evidence provided to support the need for improvement/change?<br>• Did the literature review provide a foundation and justification for the change? | | |
| **2. Action path and intervention quality:**<br>• Did the action plan effectively address the problem?<br>• Did the intervention design reflect the intended change?<br>• Were the intended study objectives and outcomes well defined?<br>• Were there 2-3 cycles of action/intervention? | | |
| **3. Data collection, analysis, and reporting:**<br>• Did the data selected to measure results match the task?<br>• Were multiple ways used to gather the data?<br>• Was the data analysis (methodology) sound and conclusive?<br>• Was the summarization and report of the findings shared**?** How**?** | | |
| **4. Evaluation of the intervention (incl. interim review):**<br>• Did the researcher report on success (or not) of the intervention?<br>• Was it clear to what extent the objectives and outcomes have been reached or not?<br>• Were limitations or shortcomings adequately identified/addressed? | | |
| **5. Potential iterations and continuous improvement options:**<br>• Were study adjustments or alternative action paths discussed?<br>• Did reflection introduce new ideas for intervention or improvement strategies?<br>• Were implications for other teaching/learning areas described? | | |
| **Total Score** | | |