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**Learner-Centered Education Program**  
Arizona Board of Regents  
Attachment A  
**INSTITUTIONAL SUPPORT FORM**



Proposal Title: Learner-Centered Assessment Tools

Institution: Arizona State University Dept/Unit: University Evaluation/Center for Learning and Teaching Excellence

**Multi-Campus/University Projects** (check other campuses or universities participating)  
 ASJ Main  UA  
 ASJ East  UA South  
 ASU West  NAU

**List other participating agencies:**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*Briefly describe the program and the development plan.*  
To develop and disseminate a web-based toolbox of assessment materials and instruments for faculty.

**Funding Category**

Indicate a primary (P) and, if applicable, secondary (S) funding category:

Professional Development P \_\_\_\_\_ Program or Course Development/Modification \_\_\_\_\_  
LCE Research \_\_\_\_\_ Improved Assessment of Learning Outcomes S \_\_\_\_\_

**Authorizations**

**Project Director**

VICKI HARMON *Vicki Harmon*  
Signature: \_\_\_\_\_  
Mailing Address: ASU, P.O. Box 875003 Tempe, AZ 85287-5003

Name: VICKI HARMON Title: Consultant, University Evaluation  
Phone: 480-965-3047 Fax: \_\_\_\_\_ Email: Steve.miller@asu.edu

**Department Chair / Unit Director / College Dean / Provost (may not be PD)**

Name: Steve Miller Title: Interim Director  
Signature: *Steve Miller*

**Official Authorized to Enter into Contractual Obligations**

Signature: *Cheryl A. Lee*  
Name: Cheryl A. Lee, CRA Title: Sponsored Projects Site Supervisor  
Phone: (602) 543-4505 Fax: (480) 965-0048 Email: lee.cheryl@asu.edu

c/o Arizona Board of Regents  
2020 N. Central Avenue, Suite 230  
Phoenix, AZ 85004  
Phone: 602-229-2500 • Fax: 602-229-2555  
[www.abor.asu.edu](http://www.abor.asu.edu)

## **LEARNER CENTERED ASSESSMENT TOOLS**

### ***PART I - abstract***

#### **Goal**

To equip faculty and departments with tools for developing, assessing, and improving learner-centered education.

#### **Product**

A comprehensive library of online tools for developing, assessing, and improving learner-centered education.

#### **Key objectives**

- Develop a user friendly, searchable (by class size, discipline, related fields, competencies, etc.), online database of tools for developing, assessing, and improving learner-centered education.
- Disseminate information on the availability of the tools through the Program Review process, CLTE workshops and other faculty development workshops at ASU, consulting, newsletters.
- Develop and disseminate tools for self-evaluation of the alignment of program mission and objectives, curriculum, and course objectives.
- Develop and/or identify examples of good practice for writing learner-centered outcomes at the program and course level.
- Develop and/or identify examples of "direct" assessment methods. How-to, step-by-step, instructions for using each method and a table identifying best uses for a given technique. E.g. portfolios, group projects, presentations and performances, plus/delta, muddiest point.
- Develop and/or identify sample rubrics to support the use of direct assessment methods.
- Develop and/or identify examples of curriculum development tools that support a systems approach to curriculum development. E.g. curriculum mapping.
- Provide tools that support the consulting and training efforts of the Office of University Evaluation, the Center for Learning and Teaching Excellence, the Office of the Provost, and the Division of Graduate Studies as university accreditation officer.

#### **Anticipated outcomes and measures**

- Faculty will use the web site as a resource to develop and refine course objectives and assessment strategies that support a learner-centered model of instruction.
  - Measure - Number of web site hits from ASU IP addresses
- Departmental committees will utilize the web tools for curriculum development and improvement.
  - Measure - Number of committees reached through consulting efforts.
- Campus departments who consult with or train academic units on program and course development will use the tools in their consulting/teaching strategy. E.g. Center for Learning and Teaching Excellence, Office of University Evaluation,
  - Measure - Number of consulting contacts and the type of tools recommended.
- Regents' institutions and institutions outside ASU will utilize the learner-centered web tools resulting in increased visibility for ASU as an institution actively supporting learner-centered education.
  - Measure - number of off campus hits to the web site.
- The number of departments/programs reporting "direct" assessment measures in the Academic Program Review document will increase.
  - Measure - Number and types of direct assessment s reported in Academic Program Review documents
- Students will report an increased use of LCE tools in the classroom.
  - Measure - number and types of LCE tool usage reported by students of faculty and programs that have utilized the tools.

### ***PART II - Identification of need***

#### **A vision of learner-centered instruction at ASU**

What characteristics will ASU exhibit as a learner-centered institution? Huba and Freed state, "A college must satisfy five conditions, at least, to validly claim that it has been transformed into a Learning Paradigm-governed college. First it must have identified its intended learning outcomes in detail. Second, it must have developed a system for measuring the achievement of these outcomes at both the individual student level and the aggregate class, program, and institutional levels. Third, its curriculum must have been built backward from the intended outcomes and must be developmental.

Fourth, it must provide a wide range of powerful options for achieving required learning outcomes. Fifth and finally, it must continually and systematically investigate alternative methods for empowering students to learn." (page 65)

The vision of ASU as an ideal learner centered institution would include the following characteristics:

At the institutional level

- ASU encourages and actively supports learner-centered education. The Academic Program Review process incorporates learner-centered, direct assessment and feedback as a component of the review process.
- General Studies student learning outcomes are measured through direct assessment with the results used to improve the GS program.

At the program level

- Student learning outcomes define what students should know and be able to do upon completion of the program.
- Whenever possible, the level of student achievement toward program learning outcomes is measured directly, identifying areas for improvement at the program and classroom levels.
- The curriculum provides ample opportunities for students to progress and acquire the knowledge and skills defined in the student learning outcomes.
- Classroom learning activities actively engage the student in the learning process and provide opportunities to develop the skills, knowledge, and attitudes identified in program learning outcomes.
- Departments and faculty view students as active participants in the learning process.

At the classroom level

- Students actively engage in learning activities that promote higher order thinking and analysis.
- Student classroom success is measured through direct assessment of the level of knowledge, attitudes and skills that have been developed.
- Students receive frequent and prompt feedback on their progress toward course learning outcomes.

**The goal of this project is to equip faculty and departments with tools for developing, assessing, and improving learner-centered education.**

While some ASU departments have made great strides in supporting and instituting learner-centered education, many others continue using a "teacher centered" model. Teacher centeredness is easily recognized as one reviews program objectives as presented in ASU annual departmental assessment reports. Teacher centered verbiage found in departmental program objectives include:

- Provide opportunities for students to...
- Prepare graduates for...
- Provide a rigorous and complete education...
- Develop writing proficiency in our students
- Help students establish a connection between theory and real world practice.

Programs desiring to move to a learner-centered approach of instruction will review their program structure from the top down to ensure alignment and consistency of message in the mission, program outcomes, curriculum, and course outcomes. The wording of program level outcomes impacts the wording of course level outcomes and how these outcomes are assessed. In *Learner-Centered Assessment on College Campuses*, Mary Huba and Jann Freed state, "Assessment is a learner-centered movement which encourages us to focus on the student learning component of our teaching as it takes place within the entire system of our institution and within the smaller systems of our academic programs and courses."

Within courses, learning goals and objectives are critical for improving both teaching and learning, yet our experience is that many faculty do not write them and some do not even know what they are. Learning goals and objectives help faculty make decisions about the content and skills that are critical and those that can be cut from the course. They provide direction for classroom and out-of-class activities. They guide the design and implementation of evaluation strategies. For students, goals and objectives are the answer to the question, "Is this important?" They tell students what exactly they need to learn, and they help students self-assess their learning in a timely fashion. Unfortunately, as is the case with program objectives, course objectives are often teacher-centered rather than learner-centered, for example,

- This course will present...
- Students will be assigned...
- The instructor will provide...

In contrast, learner-centered goals focus on what students will know or be able to as a result of the learning process, e.g.,

- Students will be able to calculate their typical daily intake of saturated fat and determine if it is above recommended intake levels.
- Students will be able to identify the four basic purposes of business communication: to inform, to request or persuade, to build good will, and to document.
- Students will be able to explain the difference between correlation and cause.

### **Vision of the web site**

A review of learner-centered assessment tools on the web yields little. At most, one finds a web page linking to other web pages, and some useful information. The grant will support the development, in accordance with universal design principles, of a comprehensive web site of assessment tools. Faculty will use these tools to develop a learner-centered approach to program, curriculum, and course development, and assessment strategies.

The web site will include:

- Tools and worksheets for developing a mission statement, along with examples of well-written statements.
- Tools and worksheets for curriculum development such as curriculum maps, accompanied by examples in use at ASU.
- Tools and worksheets for identifying and writing student learning outcomes at the program and course level.
- Matrices to identify appropriate tools for a given situation.
- Tools and examples of practice of direct measurement at the program and course level. This area will include tools such as student portfolios, project evaluation, embedded test questions, muddiest point, plus/delta. Guidelines and worksheets for developing rubrics will be provided along with examples of rubrics used in various disciplines.

### **What will students gain from the project?**

Departments and faculty will have tools at their fingertips to help them think about and improve their programs and courses. These improvements will have a direct impact on students. The information gained from direct measures enables faculty to provide frequent feedback to students and supports programmatic improvements that directly impact students.

Possible areas of impact are presented below.

- Well-defined learning outcomes make it clear to the student the level of performance expected of them.
- Assessment strategies engage the student in self-reflection and provide regular, ongoing feedback.
- Programs developed as a system, with each of the parts (courses) supporting the whole, result in students experiencing a cohesive, well-integrated course of study.
- Curriculum changes and improvement will be based on actual measurement of student achievement toward learning outcomes.

### **Advancement in LCE**

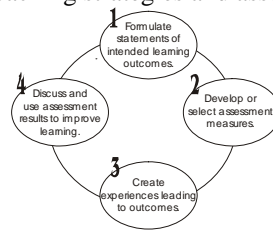
*(How the proposal will improve on current practice in the discipline; How the project will change the existing course or activity into something that is learner-centered, as well as the benefit of doing so.)*

The proposed web site will provide easy access to a comprehensive site of tools to aid faculty as they seek meaningful ways to assess student learning outcomes. A search of the web did not yield an existing site of the type proposed by this grant.

Huba and Freed state, "We can both encourage and shape the type of learning we desire through the types of assessment we use." Current practice among many ASU departments is to rely solely on survey (indirect) data to measure performance toward departmental goals or learning outcomes. Many instructors view assessment only as a means of developing student grades. Moving toward direct measurement of outcomes will provide departments with information that can be used to identify areas in need of improvement. Using assessment in the classroom provides students with frequent feedback on their performance as well as information about the course itself that can be used to improve instructional methods and course content.

Huba and Freed put it this way, "The quality of student learning at the end of a program - the focus of program or institutional assessment - depends in part on how and how well we are assessing student learning in our courses... In turn, the quality of student learning in courses depends in part on the type of information yielded by program assessment data. Do the programmatic data reveal that we should focus more on student writing? Do they indicate that a particular concept is poorly understood by graduates and needs greater coverage? Do students report that some courses seem outdated or that a prerequisite is misplaced? Program assessment and classroom assessment interact to provide data to enhance student

learning." Assessing learning outcomes stated in a learner centered style forces instructors to think about what students should know rather than what they will teach. Teaching strategies and assessment work together in the instructional cycle.



### **Glossary of terms used in this proposal**

**Assessment** - "Assessment is the systematic collection, review, and use of information about educational programs undertaken for the purpose of improving student learning and development." (Palomba & Banta, 1999)

**Competency Based Outcomes** -A combination of skills, abilities and knowledge needed to accomplish a specific task. (Voorhees, 2001)

**Direct measure** - Students demonstrate an expected learning outcome. (Allen, 2002)

**Indirect measure** - Students or others report their perception of how well a given learning outcome has been achieved.

**Learner centered** - Learner-centered education places the student at the center of education. It begins with understanding the educational contexts from which a student comes. It continues with the instructor evaluating the student's progress towards learning objectives. It places the responsibility for learning on the student, while the instructor assumes responsibility for facilitating the student's education.

**Portfolio** - A portfolio is an assessment process that is based on the collection of student work (such as written assignments, drafts, artwork, and presentations) that represents competencies, exemplary work, or the student's developmental progress.

**Rubric** - A set of categories that define and describe the important components of the work being completed, critiqued or assessed. Each category contains a graduation of levels of completion or competence with a score assigned to each level and a clear description of what criteria need to be met to attain the score at each level.

**Student learning outcome** - An operational statement describing specific student behaviors that evidence the acquisition of desired knowledge, skills, abilities, capacities, attitudes or dispositions. Learning outcomes can be usefully thought of as behavioral criteria for determining whether students are achieving the educational objectives of a program, and, ultimately, whether overall program goals are being successfully met.

**Systems approach** - Focuses on how the thing being studied interacts with the other constituents of the system—a set of elements that interact to produce behavior—of which it is a part.

**Universal design** - The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

**PART III - Technical needs** - only web development software will be used.

**PART IV - Work plan/timeline**

TASK	LEAD PERSONNEL	TIMELINE
Develop tools		Spring/Summer 05
Research and identify expert models	OUE	May - June 05
ID tools to be included	OUE	May - June 05
Develop format for presentation of tools (template)	OUE	May - June 05
Develop matrices for tool usage	OUE	June - July 05
Generate glossary	OUE	May - June 05
Establish copyright procedures	OUE	May - June 05
Hire GA	OUE	April - May 05
Work with 1 department to design and test model	OUE	Summer/fall 05
ID # of ASU programs without learner centered outcomes	OUE	June 05
ID programs with upcoming program review	OUE	June 05
Recruit departments and select one	OUE	June - July 05
Review and revise current program/course goals/objectives	OUE	Sept - Dec 05
Link student outcome measures to goals and objectives	OUE	Sept - Dec 05
Provide tools to the university community at large	OUE and CLTE	Spring 06
Plan and conduct assessment workshops	OUE and CLTE	March 06
Promote web site	OUE and CLTE	Ongoing
Consult with individual departments and faculty	OUE and CLTE	Ongoing
Promote at national and regional conferences	OUE and CLTE	June 06
Plan and conduct summer institute	CLTE	May 05
Contract consultant	CLTE	January 05
Select and book site	CLTE	February 05
Recruit and identify institute faculty	CLTE	March 05
Assess project	OUE and CLTE	Fall 06
Develop survey of students instrument	OUE and CLTE	September 06
Develop consulting/reporting/records strategy	OUE and CLTE	September 05
Poll students in class for LCE tool usage in classroom	CLTE and OUE	September 06
Develop web	OUE	Summer/fall 05
Design site	OUE	June - Sept 05
Write html / program database	OUE	November 05
Run usability test	OUE	November 05
Test for universal design	OUE	November 05
Develop site map	OUE	October 05
Develop web tracking strategy	OUE	September 05
Obtain software licenses	OUE	September 05
Hire web developer	OUE	September 05

**PART V - Key personnel- project mail to Harmon, ASU, Box 875003, Tempe, AZ 85287-5003**

Judy Grace, Center for Learning and Teaching Excellence; Co-Project Director; judy.grace@asu.edu; 965-2495

Vicki Harmon, Office of University Evaluation; Co-Project Director; harmon@asu.edu; 965-2293

Susan Ledlow, Center for Learning and Teaching Excellence; susan.ledlow@asu.edu; 965-8645

Jamie Cromack, Center for Learning and Teaching Excellence; Jamie.Cromack@asu.edu; 965-3281

Steve Miller, Office of University Evaluation; steve.miller@asu.edu; 965-3047

***PART VI - Performance measures***

**Project work plan for assessment of project effectiveness**

At the program level

1. Identify academic programs coming up for review in two years. From this list, recruit a department who will agree to self assess their department using the departmental learner-centered assessment rubric and provide feedback on the instrument.
2. As a baseline, identify the number of ASU programs having program level student learning outcomes.
3. Identify assessment strategies being used at the program level and determine if the department has increased the use of direct assessment strategies.
4. Gather qualitative data on site usability,

At the classroom level

1. Identify a faculty member who will use the web tools to support learning-centered assessment in the classroom and provide specific feedback as to the usefulness of the web tools.
2. User survey
3. Provide a feedback mechanism (indirect measure) on the web site and ask users to complete an evaluation of the usefulness of the information they have accessed.

Additional measures are noted in the abstract with the associated desired outcome.