

Arizona University System
Technology and Research Initiative Fund
BUSINESS PLAN

LEARNER-CENTERED EDUCATION GRANTS
Supported through the Regents Innovation Funds

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LEARNER-CENTERED EDUCATION GRANTS

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**LEARNER-CENTERED EDUCATION GRANTS
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Executive Summary

Learner-centered education (LCE) is a strategy of education that places improvement of students learning at the center of decision-making processes and policies at all levels of the institution. It is characterized by the use of clear, measurable goals and student outcomes, and the direct involvement of learners in activities that produce deeper understanding of the content through the development of skills that are readily transferable to life and work.

In November 2001, following the passage of Proposition 301, the Arizona Board of Regents allocated \$500,000 of these monies for five years to fund faculty grants for expanding learner-centered education within the Arizona University System. The purpose of the grants is to integrate learner-centered education throughout the system, with the goal of improving the overall education of the students who become the work force for Arizona's future.

The faculty and administration at all three universities supports this project. A committee comprised of regents, provosts and faculty leaders provide oversight for all learner-centered activities. Faculty based groups serve in an advisory capacity to the Board staff on managing the grants and on the peer review panels, providing their expertise and time. The grants panel dedicated more than 400 hours in reviewing the first year's grant submissions.

In the first year (2001-02), 100 proposals were submitted; 20 have been funded. These 20 grants will directly involve approximately 14,000 students in 95 courses, taught by 188 faculty applying learner-centered approaches. In the course of the 5-year grant program, the conservative projection is that this number will swell to more than 50,000 students enrolled in 400 courses taught by nearly 800 faculty. And faculty applying these techniques in other courses not included in the grants, faculty learning from one another and students beginning to expect the benefits of the learner-centered classroom will likely result in a greater influence and change than these numbers reflect.

Accountability is integral in this project and is a key component of learner-centered education. All projects funded have defined outcomes and assessments; plans are underway through a Business Advisory Team to begin surveying employers on their satisfaction with graduates they employ and all academic programs will have defined program outcomes and assessment plans by 2008.

**Arizona University System
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LEARNER-CENTERED EDUCATION GRANTS
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1. Core Vision/Project Description

1.1. Very brief overview of the industry or area being addressed by the initiative

Learner-centered education (LCE) is a strategy of education that places improvement of students learning at the center of decision-making processes and policies at all levels of the institution. It is characterized by the use of clear, measurable goals and student outcomes, and the direct involvement of learners in activities that produce deeper understanding of the content through the development of skills that are readily transferable to life and work. An additional central goal is to prepare self-directed learners who can continue learning beyond their formal education.

Since 1998-99, the Board sought ways to address the demand for accountability and focus on the learning process and outcomes to meet the needs of students in preparation for the Arizona workforce. After many discussions, LCE emerged as a framework for both focus areas. With the rapid changes in business and technology, the Board was interested in an outcomes-based approach to ensure student success in the New Economy.

In December 2000, the Governor's Task Force on Higher Education supported learner-centered education as a means for developing Arizona's work force, as noted in Arizona at Risk, An Urgent Call for Action, the publication which details the recommendations of the task force.

In November 2001, following the passage of Proposition 301, the Arizona Board of Regents allocated \$500,000 of these monies to fund faculty grants for expanding learner-centered education within the Arizona University System. LCE grant funding provides the catalyst to jump-start and expand learner-centered education.

1.2. Discussion of mission, goals, values, vision of the particular university/college/department undertaking the initiative

A goal of the Board of Regents is to institutionalize learner-centered education throughout the university system. The grants provide a source of support for new, innovative projects and unforeseen, short-term needs which encourage innovation and provide recognition to faculty's efforts in learner centered education. From these projects "best practices" will be identified and promoted

Of particular interest are innovative projects related to enhancing student learning, assessment of learning outcomes, and/or professional development for faculty and staff. Collaboration, partnerships and coordinated efforts among educational, governmental or other entities are encouraged.

1.3. Products or services provided by the project

Our primary “product” is well-prepared college graduates and the ultimate outcome of the grants is the improvement of their educational preparation. Grants are sought in four key areas considered critical to the full implementation of learner-centered education throughout the university system.

- Faculty professional development
- Course/program modification or development
- Research on learner-centered education
- Improved assessment of learner-centered education at the course or program level

1.4. Positioning (how you want the market (business and/or academic; local, regional, national, international) and your competitors to perceive your product or service)

The Arizona University System is committed to providing students a learner-centered approach to education so that they become life-long learners and are able to enter the workplace as effective participants. With a goal of more fully implementing these changes, the universities demonstrate their responsiveness to the changing needs of the communities they serve and the larger economic needs of the state.

1.5. How the initiative will be accomplished (e.g., distinctive competencies or approaches, organizational style, approach to decision making)

Institutionalizing learner-centered principles has been promoted by the Arizona Faculties Council (AFC) the Board of Regents, university administrators and university teaching and learning centers. Academic programs are expected to incorporate and adapt effective learner-centered strategies using outcomes from the grant initiatives. Professional development workshops are provided for faculty by the teaching and learning centers at each institution.

The AFC has taken leadership in promoting the grant program by providing faculty for the review panel, conducting training for the reviewers, establishing a review process and assisting Board staff in the monitoring of the grants.

Faculty peers from throughout the university system review the grant proposals and make recommendations for funding to a learner-centered education team comprised of regents, faculty leaders, and university provosts. Proposals recommended for funding will have been screened against a set of criteria using a published rubric. In addition to educational merit, the proposals must have clear outcomes and performance measures.

2. The Market

- 2.1** Choices available to potential customers (e.g., students' other options for a degree program, or patent owners' or business owners' other options for business and technical assistance)

The educational market is increasingly competitive. For-profit institutions re-tool quickly to accommodate changing needs of students who demand more flexibility in time and location to meet their complex lives and expect an education which insures specific preparation for the work force. Public universities serve broader populations and multiple constituencies while fulfilling more comprehensive missions than the for-profit schools, but also must respond to these changing needs though often not as quickly. The grant funding enables the faculty to have another means for responding to change.

2.2 Market size and trends

Universities are expected to compete in the higher education "market place" as students are increasingly consumer oriented and many are mobile, selecting the programs which best serve their needs. According to Strategic Leadership in academic Affairs, Clarifying the Board's Responsibility, one of the recent and growing trends in higher education is a shift to focusing on the student, the learner, and less on the faculty delivering a body of knowledge. Inherent in this is creating opportunities for the active engaged learner, rather than the passive learner, a receiver of information provided by the teacher. The grants are one means by which faculty in the university system can redesign and improve instruction to respond to this changing trend.

- 2.3** Rivals and competition, including community colleges, universities, research entities, not-for-profits, corporations.

Competition is keen among higher education institutions. Arizona universities are challenged to attract and retain:

- top students from Arizona high schools who may attend out-of-state schools
- out-of-state students who begin at an Arizona university but may return home to complete their degrees.
- non-traditional students who often need flexibility in time and location of program offerings.

- 2.4** Nature of suppliers to the program (e.g., alternative ways in which a faculty member can patent intellectual property in collaboration with a non-university entity, or sources of students before entering the proposed program, including the university's general studies program and the community colleges)

Students come to the institutions directly from high school, including students who are home-schooled and those completing the GED; transfer from community colleges; or transfer from other universities. Students enter academic programs directly upon admission to an institution or from another major or from a non-major status within the institution. The Board of Regents has established high admissions standards at the

universities to improve the quality of the students matriculating to improve the chances for their success.

In recent years the universities have expanded their relationships with the community colleges, by implementing block transfer programs for general education and jointly developing an on-line transfer information system to assist community college students in their course selection prior to transfer.

Some colleges and departments conduct outreach programs at high schools to help students explore academic options and employment possibilities, thus encouraging their remaining in high school and participation in higher education.

- 2.5 Alternatives to a traditional degree program, or alternatives to working within the university to develop intellectual property for a given faculty member or student

The universities have developed academic options to attract new students and to facilitate the continuation of those stalled in more over-subscribed majors. For example, the Bachelor of Applied Science builds on the technical knowledge and course work offered at an accredited community college. Students who enter the university focus on upper division general education and advanced theory courses, building on the prior work at the community college. Interdisciplinary programs enroll students across disciplines and can be more readily tailored to specific needs. For example, ASU offers a corporate option of their Bachelor of Interdisciplinary Studies program on-site to full time employees of Motorola, Intel and other public and private businesses. Courses can be tailored to the career goals of the students.

3. Operational Strategies

3.1 Development and Production

3.1.1. Development status

Learner centered education is promoted through three primary initiatives:

- **The academic review process.** Academic programs are required to incorporate learner-centered methods, including outcomes measures and assessments. Programs are reviewed every seven years.
- **LCE website.** This site provides information on learner- centered education definitions, techniques, “best practices” , and the grant program; it also links to related sites.
- **The grant program.** A Request for Proposals (RFP) provides the guidelines for faculty to plan their projects and submit their requests. One university’s professional teaching center conducted a workshop to help critique proposals.

3.1.2. Production process for the grants.

Review process: A panel comprised primarily of faculty, is appointed for each cycle to reviews grants, recommend those to be funded to the oversight LCE group, and to recommend changes for the future grant cycles.

Reporting process. Projects must be executed within an 18-month period from January through June in the following year. A mid-project progress report and a final report must be submitted to the Board. ABOR staff in consultation with a grants advisory team handles the day-to-day management of the grants.

3.1.3. Cost of development

Minimal cost was required to develop the grant program. Reproductions of materials and travel by Board staff for information sessions were less than \$1000.

3.1.4. Labor requirements (e.g., including student recruitment tactics, or tactics for choosing nascent, entrepreneurial firms to aid outside the university)

The grant review process is primarily a volunteer endeavor, which relies heavily on faculty reviewers from the three universities and the cooperation of some administrative units, such as grants and contracts offices. The review process for the 100 grants submitted in 2001-02 involved 18 reviewers, primarily faculty, who committed more than 400 hours in training and reviewing proposals. Reviewers participated in two daylong sessions, one for training and another for selecting the final proposals to recommend for funding. In the interim 5 teams were assigned to review, rate and prioritize one fifth of the grants, the results of which were brought to the selection meeting.

3.1.5. Expenses and capital requirements

For this first year, expenses to manage the grants were approximately \$6500. Operational costs are primarily related to the travel and per diem of the grants panel, and some part-time administrative assistance. Most of the management is provided in kind by the Board staff. For subsequent years, a support staff will be assigned half-time to the project. The operations and personnel costs will be about 5% of the monies, with 95% going directly to fund projects.

3.2. Marketing and Promotion

3.2.1 Strategy (e.g., how customers or students will be attracted, or how this product or service will differentiate itself from a similar product or service already available)

A Request for Proposals (RFP), available at the ABOR website or at institution-based information sessions, has been the principle strategy for attracting participants. The RFP allows faculty to detail and distinguish the initiative for which the funds are requested and the reviewers to make comparative judgments based on established guidelines and the available funds.

3.2.2. Method of promotion

The primary means for promoting the grant proposal process is through the ABOR website and promotion on the campuses by either the provosts offices or the office which provides professional development for faculty. One hundred proposals were submitted the first year, with little lead-time, so it is expected that more will be received in subsequent years.

3.2.3. Advertising and promotion plans

Promoting the grants: Each university handles advertising and promotion, in an effort to submit more and better proposals, with the goal of having more proposals funded.

Promoting the outcomes. As students graduate who have received a more learner-centered based education, the expectation is that employers will be increasingly satisfied with their performance. The ABOR Business Advisory Team is developing a satisfaction survey for employers to make this assessment, and assuming that it will be positive, to use this information to promote universities' programs.

Student satisfaction with their education is monitored through a common senior survey conducted at each university. Students are asked questions related to their satisfaction with their general education and their ability in key areas, such as writing and math.

3.3 Project Management

3.3.1 Description of the organizational setup to support the initiative

The Arizona Board of Regents established a **Learner-Centered Education (LCE) Team** to provide oversight to all of the learner-centered initiatives, including the grants. This team group is comprised of 3 members of the Arizona Board of Regents, three provosts (one from each university), three members of the Arizona Faculties Council (one from each university), one student regent and 1 ABOR staff member. The team approved the initial RFP, makes final decision on proposals to be funded and establishes priorities for the upcoming year's process. A **review panel** is appointed for each review cycle, based on guidelines approved by the LCE Team, which recommends those proposals to be funded to the LCE Team. A professional ABOR staff member serves as program director.

3.3.2 Advisory board or other oversight, if appropriate

A **grants advisory group** with membership from each university addresses the grant process and makes operational modifications and clarifications to the RFP, as needed, developed the rubric for the review and the tools for screening the grants. It will also assist in reviewing the interim and final reports submitted by the grantees.

3.3.3 Support services required (attorneys, accountants, advertising agencies)

The primary support services needed for the grant programs are individuals in the sponsored projects offices at each institution, who have signatory authority to accept the

grants. These offices sign off on the RFP before they are submitted to the Board, work with ABOR staff on guidelines for the budget submission, and monitor the expenses for the grantee.

In addition, a consultant is hired to review the budgets of those RFP's recommended for funding by the review panel and to make recommendations to the ABOR staff related to consistency with the requirements of the grant, the appropriateness of the amount of funds requests for the objectives of the grants, etc.

In addition to the overall management and coordination, the Board staff distributes and monitors the funds.

3.4 Risks and Plans to Overcome Risks

3.4.1 Legal risks and means to minimize them

3.4.2 Regulatory problems and how to address them

The primary regulatory problems for the grants include:

- Those receiving grants overstate funding needs.
- Funds may not be used as stated by grant recipients
- Proposers may not follow through on the outcomes and assessments.

These risks should be ameliorated through the screening, oversight and reporting process of the grants.

An external consultant with a background in grant funding reviews all of the funded grants for consistency with stated objectives and appropriateness of levels of funding. Further all grants must be signed off by the grants and contracts (sponsored projects) offices at each university, indicating that the correct formulas are being used for items, such as benefits allotments for personnel costs and overhead.

Funded projects must adhere to several steps of review.

- Half of the money is released initially after the Board office receives a "Conditions for Award of Funds" form, signed by the project director and an authorized individual (grants and contracts personnel. The form describes the rules of the grant and the reporting requirements and must be accompanied by the objectives of the project and the assessment plans
- Two progress reports are required: a mid-project status report and a final report. For the first, the report will include the status of progress toward meeting the objectives and any available information on the assessment, in addition to a financial report. Following a review by Board staff and a member of the advisory group, the remaining funds will be released. A final report is due within 30 days of the end of the grant.
- The Board staff assigned to manage this project will meet with each project director during the period of the project with the objective to observe the activities.
-

3.4.3 Political risks and how to ameliorate them

Political risks for learner-centered education and the grant program are:

- Faculty may be resistant to the changes expected with learner-centered education, feeling a loss of control and feeling marginalized
- Students may not like these methods. Learner-centered education places more responsibility on the student and there could be resistance particularly in the transition period when courses are changing from traditional delivery to LCE methods.
- There is little research specific to the effectiveness of these methods.
- Faculty may leave the university before the grant is complete, which could threaten resolution of the grant and the effective use of the money.

These risks should be ameliorated by demonstrating the effectiveness of these methods through the faculty and student satisfaction and increased student learning, based on assessments. The grants reports will be the first coordinated effort to obtain these kinds of results, which will be disseminated to faculty. Further, all programs now require outcome based assessments. Efforts will be made to encourage proposals for research on learner-centered education, especially in the latter years of the program when learner-centered education is more widely integrated into the programs and courses.

It is expected that in some cases faculty may leave prior to the end of the grant period, given the mobility of faculty and the numbers of grants. In fact, two project directors have left during the first cycle. But the risks are ameliorated as follows: 1) the money is given to the institution, not the faculty, so the money stays in the system; 2) the requirements of the grants are detailed so that another faculty could pick up the project; further, this faculty would also receive recognition on their vita for grant activity; 3) in most cases, grants involve more than one faculty so that others are available to maintain the project. The progress reports will also identify where personnel changes may have occurred; if problems arise, further funding will be terminated.

3.5 Sustainability

3.5.1 Anticipated funding sources for on-going support

The grants should provide for sustainability of the initiatives in the following ways:

- **Matched funds.** These are match grants which build on university and external funding. Each funded grant must have a 25% match from the university.
- **Institutional support.** Each proposal must submit a letter of support from the department chair or dean indicating how the project supports the overall mission of the department or college. Since the funds are for start-up or short-term projects it is expected that there will be sufficient university interest and resources to maintain them.
- **Faculty transferability and collaboration.** Based on the first year of the grants nearly 80-100 courses will become more learner-centered each year. Faculty will apply these techniques in their other courses and also share their projects, methods and approaches with colleagues.
- **Programs review process.** By 2008 all academic programs will have gone through a compulsory review process which requires learning outcomes and assessments, a key provision of learner centered education.

4. Goals/Metrics/Outcomes

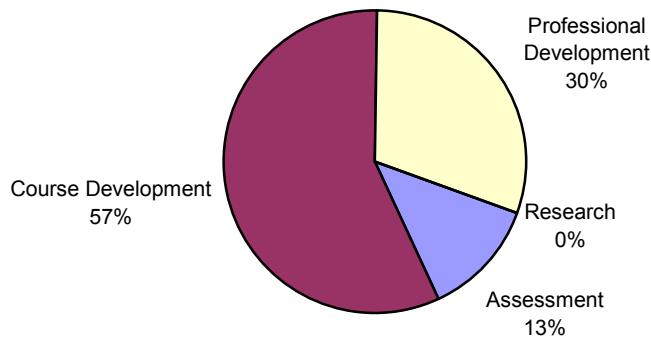
The following funding ranges were set as guidelines for the LCE Grants:

- Up to \$24,999 for individual faculty, course, or program projects
- \$25,000-49,999 for multiple departments, university-or campus–wide projects
- \$50,000-100,000 for multiple campus or multiple university projects. The top range will generally be reserved for tri-university proposals.

Figure 1
2001-2002 LCE Grants by Funding Level

Funding Level	Number of Grants
Up to \$25,000	18
\$50,000	1
\$100,000	1
Total: \$567,000	20

Figure 2
2001-2002 LCE Grants by Type



For the initial year, grants were approved in three of the four areas. No grants were submitted for research projects. The chart shows the percentage of the \$567,000 distributed by the three grant types for proposals were submitted and awarded. During the next year the LCE Team will set priorities for the remaining years to encourage submissions in all of the areas and to address other issues which may arise.

4.1 Specific and realistic goals that are clearly measurable

Each LCE grant proposal must provide expected outcomes and the assessment plan; their appropriateness and feasibility are part of the review criteria. At the end of this first grant cycle a summary report of the outcomes achieved and assessments conducted by that cohort of grants will be prepared which will be used to set broader goals for the future grant cycles.

4.1.1 Return on investment

Initially in the first year of the grant (2001-02), twenty projects were funded, involving nearly 100 courses and 188 faculty members. These courses and the initiatives with the grants are estimated to involve approximately 14,000 students during the 15 months of the initial (2001-02) grant cycle). The monies for the grant program are committed for 5 years (grant cycle in subsequent years is 18 months). Assuming a more modest projection for the next 4 years of 10,000 students, 150 faculty and 80 courses involved in each year's grants, they will have a substantial impact on the incorporation of LCE in the universities with more than 50,000 students in 400 courses taught by nearly 800 faculty.

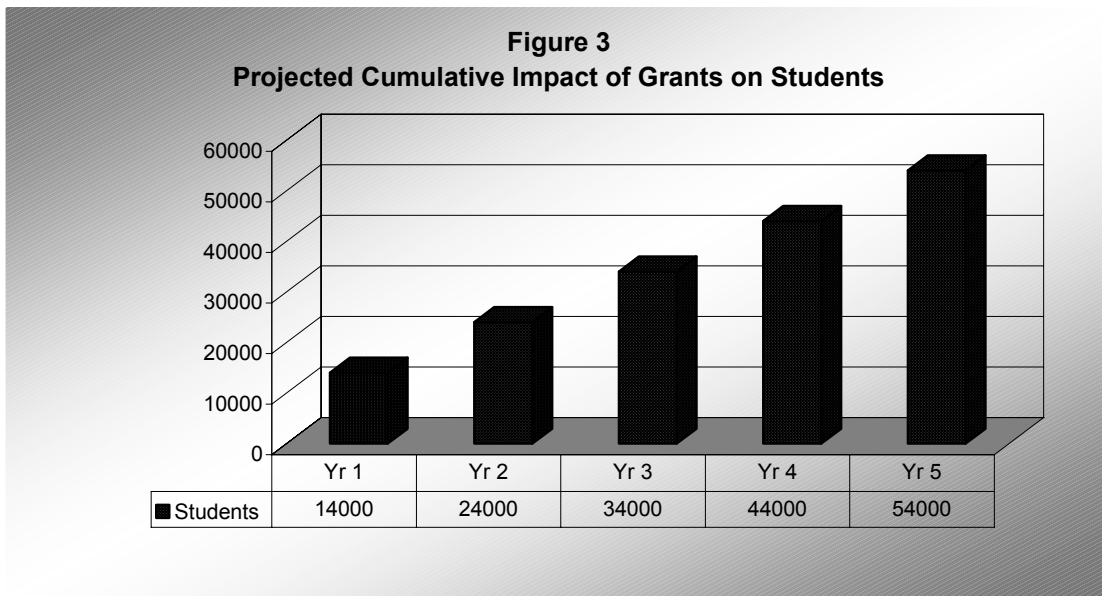
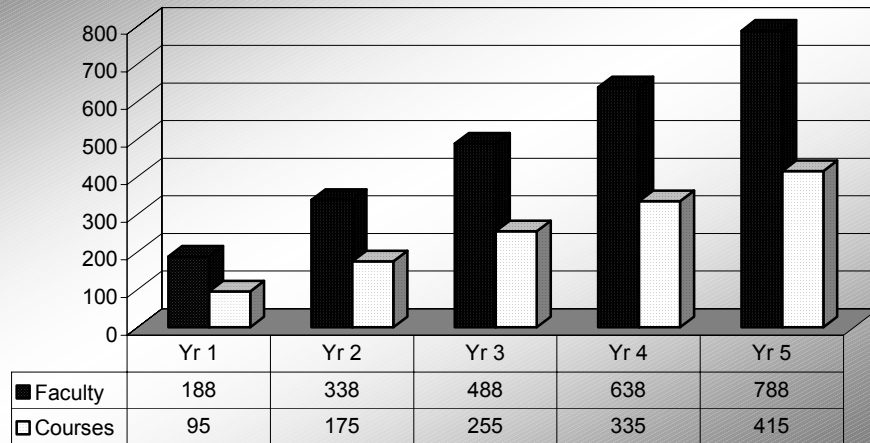


Figure 4
Projected Cumulative Impact of Grants on Faculty/Courses



4.1.2 Work force contributions

In the future the quality of the graduates should improve which will be measured through student and employer satisfaction surveys.

4.1.3 Specific curriculum innovations

Each grant approved for funding must provide expected outcomes and plans for assessment of these outcomes by the end of the grant period.

4.2 Timeline for achievement of goals.

The Regents established several accountability measures related to learner-centered education on which the universities must report their progress each year (Undergraduate Consolidated Accountability Report, UCAR). Two accountability measures address programs with learning outcomes and assessment of learning outcomes. For those measures not showing progress toward the approved goal, a plan for improvement is submitted. The timeline for achieving each goal is proposed by the university and approved by the Regents. Learning outcomes and assessment are part of the compulsory seven-year review of all academic programs by 2008 academic programs at the three universities should have them in place.

4.3 Early Proof of Performance

The grant program was announced in November 2001 with an RFP deadline for 200102 of January 15, 2002 and awards to be announced by April 1, 2002. In that short period of time, 100 RFPs were received, faculty reviewers identified and trained, proposals

read and reviewed and 20 awards made. Due to the strong response by faculty and at the request of the LCE Team, the Regents approved a one-time budget increase of \$73,000

5. Pro Forma Financials

See Appendix A
