

# **The Primary Purpose for Restructuring Arizona's Universities: Preparing for Learner-Centered Education in 2020**

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**Faculty Stakeholders Group**

This report is five pages plus five exhibits relating to current activities in learner-centered education. Included in the exhibits is what Arizona has done and what is occurring nationally.

## Table of Contents

<i>Introduction</i> .....	1
Why a Learning Focus is Important to Restructuring Options .....	1
Why Assume Learning is the Primary Function of a University? .....	1
Learning from the Past .....	2
Recognizing the Transition State of the Present .....	2
<i>Anticipating the Future of Learning Opportunities</i> .....	2
Emergence of Hybrid or Blended Learning Methods .....	2
What Have Arizona Universities and Community Colleges Done About Being Learner-Centered? .....	3
<i>Using Learning Principles as a Solution to Future University Structures</i> .....	4
Issues Related to Faculty in a Learner-Centered University .....	4
Implications for the Arizona Restructuring Project .....	4
<i>Conclusions</i> .....	5
<i>Exhibit 1. Arizona Faculties Council (AFC) Definition of Learner-Centered Education*</i> .....	6
<i>Exhibit 2: Learner-Centered Education in the Arizona University System</i> .....	8
<i>Exhibit 3. Seven Principles of Good Practice in Undergraduate Education*</i> .....	9
<i>Exhibit 4: Learning Principles and Collaborative Action</i> .....	10
<i>Exhibit 5: Learning-Centered Assessment</i> .....	13
<i>References</i> .....	14

## Introduction

The discussion for restructuring Arizona universities has primarily centered around estimated enrollment growth through 2018 and comparing Arizona with other states on selected variables. The year 2020 covers this same period and suggests the scale of the changes necessary for future education will take time to put into action, in this case 10 years, and therefore should be the focus of the primary focus of the Restructuring Arizona's University's Project

This report assumes the primary purpose of a university is learning – for the student, the faculty, the staff, and the community. As we restructure the Arizona universities, we therefore need to consider what the learners of the future might be like, and how they will differ from the student of today. The implications to Arizona of this approach differ from those of the original and subsequent proposals under consideration by the Restructuring Project.

The Arizona board of Regents (ABOR) began a focus on Learner-Centered Education (LCE) in 1999 by “anticipating that the universities will become more effective in meeting their traditional missions and additionally responsive to the needs of the New Economy and challenges for the 21st Century through LCE.” Learner-centered education is defined by ABOR and the Arizona Faculties Council is:

- A strategy of education that places improvement of student 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 formal education.
- LCE begins with understanding the educational contexts from which a student comes. It continues with the instructor evaluating the student's progress towards achieving learning objectives. By helping the student acquire the basic skills to learn, it ultimately provides a basis for learning throughout life.
- LCE places the responsibility for learning on the student, while the instructor assumes the responsibility for facilitating the student's education.
- This approach strives to be individualistic, flexible, competency-based, varied in methodology and not always constrained by time and place.

## **Why a Learning Focus is Important to Restructuring Options**

University learning is not an assembly line process. You cannot make seemingly obvious but simplistic comparisons among universities on factors such as cost per degree. While it is possible to compare similar disciplines across similar universities, it requires an enormous understanding of the detailed processes and budget procedures of each university. A focus on learning also places the emphasis on the major product of a university. Other institutional accountability efforts follow from the learner-centered foundation -- access, affordability, quality, effectiveness, and efficiency.

## **Why Assume Learning is the Primary Function of a University?**

If learning is defined broadly, it becomes the central of the university. Students learn their course of study as well as how to interact with people and are exposed to new cultures. Faculty continually learn how their fields change and the research process itself is all about learning. Staff and administrators must continually learn to remain efficient and effective. The university engages itself with the community, helping others learn through outreach programs or special projects for various state or community problems. Learning organizations can compared to universities, where so much of the individual parts of the organization do learning as part of their primary job function (but the institutions as a whole are bound by traditions and external constraints that go counter to a learning organization). A definition of a learner-centered education, approved by the Arizona Board of Regent's in 2000, is in Exhibit 1.

## **Learning from the Past**

Universities began as centers for privileged students to learn theology and philosophy and selected professions (law, medicine, mathematics). In the United States, the 1862 Morrill Act established land grant universities with an emphasis on the “working population” and focus on agriculture, mechanical arts, and military topics. In 1944 the GI Bill of Rights provided the means for large numbers of servicemen to attend college, and in the 1960s the rapid growth in community colleges provided a lower cost and job training focus. Thus, the type of learner has changed over the last 200 years from the elite to everyone. While there have been significant changes on how this learning is provided, (e.g., classroom, laboratory, internship) the basic approaches have been remarkably similar over this period of 200 years. The university has evolved from an isolated institution to one that is intertwined with the community, providing a reservoir of possible solutions to the state’s problems and concerns, serving as an engine of economic growth, and addressing research solutions for the needs of future generations. Thus, universities have become multifaceted institutions that cannot be judged on any one component.

## **Recognizing the Transition State of the Present**

Several recent events have changed the way we provide learning, with two primary events taking precedence: 1) the use of the internet by masses of people (beginning about 1993 with the world wide web), and 2) individual choice through devices such as cell phones, walkman/iPod units, and vast amounts of information easily and freely available. These changes can be described as “connectivity” – either technical or social (new social networks form through the available technologies). Thus, students (and others) can connect with essentially anyone, anyplace, anytime, nearly cost free. *This changes the way students and others assimilate information and learn and how they respond in a university environment.* These changes have only occurred in the last 25-35 years, about one generation (both the Sony walkman and the personal computer occurred around 1980, the original internet in 1969). We are still learning how these basic changes will affect the role of learning in a university and in society at large. At this point, we know more about how people learn than we are able to put into practice. Exhibits 2-5 summarize learner-centered efforts in the Arizona universities, best practices for undergraduate education, and how to assess learner-centered education.

## **Anticipating the Future of Learning Opportunities**

What might be the learning needs of students and others be in the next 15 years (to 2020), the period for the Arizona Universities restructuring project? How will learners (e.g., students, faculty, citizens, and communities) want to learn and be capable of learning? What role will traditional universities play in relation to other ways of providing learning needs? How will their learning styles and expectations for learning options differ in 20 years?

We don’t know – the possibilities are too great to hazard a guess. However, we do know a number of things about learning, and we understand something about the possible options that could face us in the next 15 years. Some of these possibilities related to learning are:

- Will students do more self study and pass courses by exam, reducing the load on the university?
- Will professors become more of a guide/mentor than a lecturer, thus increasing the time required of the instructor per student?
- Will we remove the constraints of historical structures (e.g., 50 minute call periods, one semester chunks, and classes with large numbers of students).
- Will we invert the current sizes for freshman vs seniors (all freshmen take small seminars to avoid getting lost in the university and seniors take a combination of large classes and individualized learning)?
- Will we learn more about our learner’s needs, through continuing assessment and feedback, and personalize the solutions to learner?

## **Emergence of Hybrid or Blended Learning Methods**

Teaching (or learning) approaches vary over time, by subject, and student audiences, and by presenter. In the earlier days it was by voice and blackboard (seminar, lecture, discussion group, individual interaction), then this basic approach was augmented by overhead slides or color slide projector, then by PowerPoint slides and interactive white boards connected to a computer that is connected to internet. Different approaches were added in some settings to include student team work or individual internships outside the classroom, internet collaboration with students or presenters at other sites (including in other countries), and e-learning for any time/any place activity. We are now

speaking of including some very old models (story telling) or very new approaches (international participation in learning based on gaming processes or new modes of social interaction with electronic support).

Which format or tool is the best depends on the circumstances. One cannot make a categorical statement that any one method is better or worse than others. The appropriate answer is there will be more than one format or tool in most settings. This type of learning is called hybrid or blended. When practiced, it can be within a single class, or by a curriculum, or an entire degree. For example, a student during his/her university time might take a traditional semester long course that combines several formats, a couple of classes totally by e-learning (from the local university and others), test out of some requirements by self study outside any formal classroom, and work through internships or study abroad.

The important concept here that the choice is made based on the learning needs/desires of a complex set of interactions and one type of solution does not fit all institutions or all students or all presenters.

## **What Have Arizona Universities and Community Colleges Done About Being Learner-Centered?**

Paul Eisner, former Chancellor of the Maricopa Community College District has described how the district became a learner-centered college system during the early 1990s. He noted the *traditional learning paradigm* is most concerned with individual courses, the content of the courses, and individual grades. Quantity not quality, is important (e.g., we measure the number of hours faculty teach and students are in class and the number of books in the library). He contrasted the *desired learning paradigm* as one where learning is both a product and a process, where learning occurs throughout the institution not just in classrooms. Learning comes not just from text books or lectures. The curriculum can be flexible, relevant and responsive to students. Experimentation is rewarded. Data is collect on the needs of students on a regular basis. All students can learn, each learner's needs are met.

In April 1999, at a joint meeting of the Arizona Board of Regents and the State Board of Directors for Community Colleges of Arizona, the Regents began an initiative to promote the development of Learner-Centered Education across the Arizona University system. At the same time ABOR began a series of discussions about learner-centered education, developed a grant system to the universities to study options, were briefed by relevant activities on each campus, and approved a definitions and guiding principles developed by the Arizona Faculties Council on learner-centered education (See Exhibits 1 and 2). These principles are similar to those developed by others (see Exhibits 3 and 4) but are focused on the Arizona universities. In 2000 a 20-slide presentation about "Models of Learner-Centered Education was presented by the Arizona Faculties Council to ABOR (giving examples of how our student might learn differently in a learner-centered environment).

This process (1999) began with a presentation by Alan Guskin, former President of Antioch College, titled "Learning More ... Spending Less". As part of the presentation, Guskin contrasted two educational environments – focus on faculty teaching (the current method) and focus on student learning (suggested change). His examples are still relevant today.

### **Focus on Faculty Teaching (by Guskin)**

1. Courses are, for the most part, the only means for faculty teaching and student learning.
2. Students are taught in twelve to sixteen week quarters or semesters.
3. Assessment is by grades at end of course.
4. Emphasis on lecture-discussion teaching method: very limited faculty-student out-of-class contact.
5. Emphasis on faculty's way of knowing; instruction is focused on academic disciplines.
6. Faculty member is primary agent responsible for student learning.
7. Graduation = accumulation of course credits.

### **Focus on Student Learning (by Guskin)**

1. There are blocks of learning where students can learn in many different ways and in many different arenas rather than whole courses.
2. Students engage in "mastery learning" taking the time necessary to become proficient in an area.
3. Assessment is by proof of competency, independent of course and teacher.

4. Emphasis on small intense faculty-student discussion groups; one-on-one contact with faculty members; occasional lectures; independent learning.
5. Emphasis on student's ways of knowing; multiple focus on learning academic material, interdisciplinary methods, problem-focused learning, skill competency, and so on.
6. Student is the primary agent responsible for student learning; student's individual ability and motivation affects time and effort.
7. Graduation = demonstration that required learning and competency has occurred.

Thus Arizona's universities have already begun to understand the role of learner-centered education and have some examples to showcase. However, priorities change over time, external pressures shift to new topics, and changes come slowly. Becoming fully a learner-centered institution would affect many of the strategic questions about the Arizona universities restructuring.

## **Using Learning Principles as a Solution to Future University Structures**

By using what we know about how people learn, and considering the changes in social behavior and connections that are available to learners, we can develop a set of guiding principles and best practices for how we could anticipate the some of the demand on the university. Example lists developed by others are in Exhibits 3-4 are listed in references.

### ***Issues Related to Faculty in a Learner-Centered University***

The faculty have the most contact with students and together with university administration set the basic standards of performance. To move to a learner-centered institutional focus will require new approaches to learning.

- There is a need for institutional flexibility to allow faculty the opportunity to embrace "new" approaches to learning, for removing institutional barriers that resist change, and for implementing known research results into effecting learner-centered methods. This also requires appropriate modifications in evaluation and rewards criteria.
- Faculty and institutions need to work together to share ideas, build on best practices of other, and to engage students in the learning process that may differ markedly from the familiar approaches to day. This will take time and needs to have encouragement.
- While each university's mission may be somewhat unique, faculty share common needs to be effective in a learner-centered institution; these needs include providing necessary student support services, efficient and effective administrative procedures, and appropriate workload distribution among teaching, research, and service to the profession and the community.
- More... ideas?

### ***Implications for the Arizona Restructuring Project***

While there are several guiding principles and strategic questions in the project Scope of Work, the reasons primarily cited as a need for restructuring seem to be 1) growth of student numbers, 2) productivity, (educational cost/student) and 3) financial limits of the state. Other important factors are student access to education, quality, and the role of the university in community and state problem solutions.

We need to understand the driving forces of change for the future rather than rely on those of the past. Continuing to focus too heavily on extrapolations of the past or over reacting to issues of the present, may lead to a restructuring result that does more harm than good. Focusing on cost and counting heads as the primary reasons for restructuring our universities misses the fundamental changes the system needs to prepare for the future. Focusing on learning, with appropriate attention to other relevant factors such as efficiency, effectiveness, quality, and student access, should address our futures needs in an affordable way.

Basing our needs assessment on the changing needs of the learner over the next 15 years is the fundamental change in the Arizona Universities Restructuring Project.

## **Conclusions**

By focusing on the learner-centered education as the key factor in restructuring, we would also address the guiding principles and strategic questions of the project Scope of Work. However, it would be in a more systems perspective manner and one that would likely be more successful in sustaining (that is, being efficient and effective) the universities as important Arizona institutions as the environment changes around us. Using either approach, we should expect:

- Significant differences in how the universities define and address their missions, the roles of faculty and students, and how learning takes place. The overall perspective and requirement that, as a system, we address what needs to be addressed would rest with the Arizona Board of Regents.
- Learning to be increasingly a “hybrid approach” where different approaches are taken for different purposes. There will be significant change here if university policies change to accommodate the transformation to learner-centered approaches.

## Exhibit 1. Arizona Faculties Council (AFC) Definition of Learner-Centered Education\*

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. By helping the student acquire the basic skills to learn, it ultimately provides a basis for learning throughout life. It therefore places the responsibility for learning on the student, while the instructor assumes responsibility for facilitating the student's education. This approach strives to be individualistic, flexible, competency-based, varied in methodology and not always constrained by time or place.

**Instructional Delivery.** Learner-centered education advocates a student-focused teaching and learning environment. Educators attempt to maximize student productivity, knowledge acquisition, skills augmentation and development of personal and professional abilities. Such educators may use a variety of instructional tools and methods, as well as flexible arrangements of time and place. Student-centered educators urge students to join them in the learning process. Learners assume primary responsibility for their choices and have opportunities to exercise control over their learning. These efforts may often lead to collaborative partnerships among university faculty, administration, staff and the community at large.

The learner-centered environment facilitates the exploration of meaning and content knowledge through personal and interpersonal discovery. The process implies active involvement by the student and the integration of academics with the student's total development. Examples of learner-centered educational practices include, but are not limited to:

- Collaborative group learning, both inside and outside the classroom;
- Individual student research and discovery;
- Research and discovery by students and faculty together;
- Problem-based inquiry learning;
- Student-faculty studio and performance activities;
- Asynchronous distance learning;
- Synchronous interactive distance learning;
- Service learning activities;
- Hands-on, experiential learning activities;
- On-site field experiences;
- Self-paced tutorials.

Learner-centered education also creates an environment that supports the individual as a whole person. It attempts to meet the individual needs of a broad range of learners who have different ways of knowing, skills and cultural backgrounds. Different learning styles may be addressed by a variety of means, such as music, art, performance, visual representations and auditory input.

Credit hours and time in the classroom may not necessarily be coupled in learner-centered education. Although students with background knowledge and experiences in a content area may quickly master the course material and required skills, others may need more time and additional help. Consequently, students in learner-centered environments will often complete courses at different rates. Flexible course time frames can be accomplished through such varied means as instructional contracts and self-paced modules.

**Services.** Educational services that support the whole student may include:

- Providing appropriately focused counseling, advising and tutoring services;  
Offering supplementary services such as child care, elder care and referral to community agencies;
- Encouraging co-curricular activities such as debate, public lectures, fine arts performances, intramural athletics, museum exhibits, workshops and community outreach;
- Accommodating special needs, such as handicap access, interpreters, readers for the blind, note takers, and adaptive technologies.

**Assessment.** Learner-centered education must retain the rigor and standards that traditionally have characterized higher education. The emphasis is on the student's competence and proficiency in specific areas of academic and professional knowledge, skills and understanding. Competency-based assessment is an integral part of learner-centered education. The learner is asked to achieve and demonstrate competence in academic and professional disciplines. Assessment may take a variety of forms, such as: tests, demonstrations, papers, portfolios, performances, individual reports, group reports, individual projects, group projects, and electronic presentations. Competence in an academic or professional area may be demonstrated by the learner's application of knowledge in solving real or simulated problems.

*\* Approved by the Arizona Board of Regents in January 2000)*

## Exhibit 2: Learner-Centered Education in the Arizona University System

### Guiding Principles for Learner-Centered Education

*Developed by the Arizona Faculties Council and  
Accepted by the Arizona Board of Regents on August 13, 1999*

Each university, within the parameters of its individual mission, actively seeks to improve student learning. The Board of Regents, within the parameters of its statewide mission, actively seeks to provide support and oversight for each university's efforts to improve student learning.

*Faculty, with administrative support, will strive to:*

1. Focus their instructional efforts on achievement of student learning outcomes.
2. Recognize, value, and adapt to the diversity of student learning styles and needs in their community.
3. Understand that no one instructional model is appropriate in every circumstance and select approaches that maximize student opportunities for learning.
4. Match learning goals with pedagogical approaches known to be effective in achieving those goals (such as active learning, problem-based learning, technology-delivered education, alternative schedules, and tutorial modes).
5. Optimize the opportunity for quality student-faculty interactions in support of learning.
6. Optimize the opportunity for quality peer interactions in support of learning.
7. Design curricular approaches, which take into account the potential time investments of both students and faculty.
8. Share information cooperatively on approaches and innovations proven successful in enhancing student learning.

*Arizona's public universities, with the participation of the faculty, will strive to:*

1. Emphasize a holistic approach to creating a learning community, connecting their courses, curricula, residential, and social environments to broad learning goals for students.
2. Cultivate an environment of experimentation and flexibility in designing learning opportunities for students.
3. As publicly funded institutions, consider the resource requirements of learner-centered education and balance available resources with the educational options provided to students.
4. Through the promotion and tenure, annual review, and merit systems, recognize and promote the kinds of faculty enterprise necessary to support learner-centered initiatives.
5. Provide appropriate support resources and faculty time to enable continuing redesign of curricula using principles, methods and practices that are more learner-centered.
6. Increasingly assess, as appropriate, the effectiveness of different instructional approaches in achieving student learning outcomes.
7. Balance learner-centered education strategies with each institution's other responsibilities.

*The Arizona Board of Regents, with input from faculty and the universities, will strive to:*

1. Ensure that Board policies and practices are supportive of university efforts to improve student learning.
2. Ensure that current accountability measures and goals do not conflict with the continuing redesign of curricula to be more learner-centered.
3. Promote the development of appropriate definitions and assessments of learning outcomes at the individual student level.
4. Promote the development of appropriate measures of learning performance and learning productivity at the program and campus level.
5. Monitor progress on university efforts to assess learning outcomes, improve learning performance and increase learning productivity.

## **Exhibit 3. Seven Principles of Good Practice in Undergraduate Education\***

### **1. Good Practice Encourages Student-Faculty Contact**

Frequent student-faculty contact in and out of classes is the most important factor in student motivation and involvement. Faculty concern helps students get through rough times and keep on working. Knowing a few faculty members well enhances students' intellectual commitment and encourages them to think about their own values and future plans.

### **2. Good Practice Encourages Cooperation Among Students**

Learning is enhanced when it is more like a team effort than a solo race. Good learning, like good work, is collaborative and social, not competitive and isolated. Working with others often increases involvement in learning. Sharing one's own ideas and responding to others' reactions improves thinking and deepens understanding.

### **3. Good Practice Encourages Active Learning**

Learning is not a spectator sport. Students do not learn much just sitting in classes listening to teachers, memorizing pre-packaged assignments, and spitting out answers. They must talk about what they are learning, write about it, relate it to past experiences, and apply it to their daily lives. They must make what they learn part of themselves.

### **4. Good Practice Gives Prompt Feedback**

Knowing what you know and don't know focuses learning. Students need appropriate feedback on performance to benefit from courses. In getting started, students need help in assessing existing knowledge and competence. In classes, students need frequent opportunities to perform and receive suggestions for improvement. At various points during college, and at the end, students need chances to reflect on what they have learned, what they still need to know, and how to assess themselves.

### **5. Good Practice Emphasizes Time on Task**

Time plus energy equals learning. There is no substitute for time on task. Learning to use one's time well is critical for students and professionals alike. Students need help in learning effective time management. Allocating realistic amounts of time means effective learning for students and effective teaching for faculty. How an institution defines time expectations for students, faculty, administrators, and other professional staff can establish the basis for high performance for all.

### **6. Good Practice Communicates High Expectations**

Expect more and you will get it. High expectations are important for everyone -- for the poorly prepared, for those unwilling to exert themselves, and for the bright and well motivated. Expecting students to perform well becomes a self-fulfilling prophecy when teachers and institutions hold high expectations for themselves and make extra efforts.

### **7. Good Practice Respects Diverse Talents and Ways of Learning**

There are many roads to learning. People bring different talents and styles of learning to college. Brilliant students in the seminar room may be all thumbs in the lab or art studio. Students rich in hands-on experience may not do so well with theory. Students need the opportunity to show their talents and learn in ways that work for them. Then they can be pushed to learning in new ways that do not come so easily.

The Seven Principles for Good Practice in Undergraduate Education were compiled in a study supported by the American Association for Higher Education, the Education Commission of the States, and The Johnson Foundation. Source: *New Directions for Teaching and Learning, Applying the Seven Principles for Good Practice in Undergraduate Education*, Arthur W. Chickering and Zelda F. Gamson Editors, Jossey-Bass, 1991.

A revised version was developed in 1996 by Erhmann and Chickering to include ways of addressing the 7 principles through use of educational technologies. It is located at <http://www.titgroup.org/programs/seven.html>

## Exhibit 4: Learning Principles and Collaborative Action (AAHE)

From: Powerful Partnerships: A Shared Responsibility for Learning

A Joint Report of the American Association for Higher Education, the American College Personnel Association, and the National Association of Student Personnel Administrators (June 1998).

<http://www.aahe.org/assessment/joint.htm>

### *A Shared Responsibility for Learning*

The following ten principles about learning and how to strengthen it are drawn from research and practice and provide grounds for deliberation and action. All those who participate in the educational mission of institutions of higher education -- students, faculty, and staff -- share responsibility for pursuing learning improvements. Collaborations between academic and student affairs personnel and organizations have been especially effective in achieving this better learning for students. We advocate these partnerships as the best way to realize fully the benefits of the findings.

1 Learning is fundamentally about *making and maintaining connections*: biologically through neural networks; mentally among concepts, ideas, and meanings; and experientially through interaction between the mind and the environment, self and other, generality and context, deliberation and action.

2 Learning is enhanced by *taking place in the context of a compelling situation* that balances challenge and opportunity, stimulating and utilizing the brain's ability to conceptualize quickly and its capacity and need for contemplation and reflection upon experiences.

3 Learning is an *active search for meaning* by the learner -- constructing knowledge rather than passively receiving it, shaping as well as being shaped by experiences.

4 Learning is *developmental*, a cumulative process *involving the whole person*, relating past and present, integrating the new with the old, starting from but transcending personal concerns and interests.

5 Learning is done by *individuals* who are intrinsically *tied to others as social beings*, interacting as competitors or collaborators, constraining or supporting the learning process, and able to enhance learning through cooperation and sharing.

6 Learning is strongly *affected by the educational climate* in which it takes place: the settings and surroundings, the influences of others, and the values accorded to the life of the mind and to learning achievements.

7 Learning requires *frequent feedback* if it is to be sustained, *practice* if it is to be nourished, and *opportunities to use* what has been learned.

8 Much learning *takes place informally and incidentally*, beyond explicit teaching or the classroom, in casual contacts with faculty and staff, peers, campus life, active social and

9 Learning is *grounded in particular contexts and individual experiences*, requiring effort to transfer specific knowledge and skills to other circumstances or to more general understandings and to unlearn personal views and approaches when confronted by new information.

10 Learning involves *the ability of individuals to monitor their own learning*, to understand how knowledge is acquired, to develop strategies for learning based on discerning their capacities and limitations, and to be aware of their own ways of knowing in approaching new bodies of knowledge and disciplinary frameworks.

## **What We Have Learned (AAHE Continued)**

### **Collaborative Futures in Support of Learning**

The evolving principles of learning, continually informed by future advances in our understanding and knowledge of the learning process, hold great promise for improved student learning. By applying these principles to the practice of teaching, the development of curricula, the design of learning environments, and the assessment of learning, we will achieve more powerful learning. Realizing the full benefit of these applications depends upon collaborative efforts between academic and student affairs professionals -- and beyond. It will require attention and action by all those affiliated with our institutions as well as by members of the larger community concerned with higher education to ensure that we achieve our mission of increased higher learning.

We call all those who serve the goals of learning to contribute to these collaborations. We ask that:

**Students** take charge of their own learning and organize their educational programs to include a broad array of experiences both inside and outside the classroom; become aware of the cumulative nature of their education, and consequently plan and monitor their development; and establish personal relationships with faculty and staff as an essential part of their education.

**Faculty** become masters of cognitive studies; develop pedagogy and curricula that draw upon and embody learning principles; become involved in all aspects of their institution's community life; and work in partnership with staff and community supporters to create learning activities based on the learning principles.

**Scholars of cognition** share their findings widely with faculty colleagues and higher education audiences and be attentive in their writings to the application of new findings to the conduct of teaching and learning.

**Administrative leaders** rethink the conventional organization of colleges and universities to create more inventive structures and processes that integrate academic and student affairs; align institutional planning, hiring, rewards, and resource allocations with the learning mission; offer professional development opportunities for people to cooperate across institutional boundaries; use evidence of student learning to guide program improvement, planning and resource allocation; and communicate information on students' life circumstances and culture to all members of the college or university community.

**Student affairs professionals and other staff** take the initiative to connect to each other and to academic units; develop programs that purposefully incorporate and identify learning contributions; and help students to view their education holistically and to participate fully in the life of the institution and the community.

**Alumni** reflect upon how what they learned in college contributed to their life after graduation and share these observations with current students and institutional officials; provide learning opportunities and mentorships outside the classroom for students; and contribute financial support to programs offering students the chance to use their knowledge in a variety of settings.

**Governing boards** understand the learning enterprise and how the institution conducts it; ask senior managers for information on how the organizational structure supports learning and for evidence of learning outcomes; and reward contributions to learning through promotion and tenure decisions and in evaluation of the president.

**Community supporters** volunteer workplace and other organizational venues for student learning; team with faculty and staff to design learning experiences in the community or workplace; serve as supervisors and mentors for student learning activities; evaluate student performance and provide models of reflective practice in their own professions; and help colleges and universities to understand the skills and knowledge needed by their graduates.

**Accrediting agencies** require in their review processes evidence of how institutions integrate learning experiences across administrative units and demand measures of learning effectiveness.

**Professional associations** disseminate best practices of collaboration on behalf of student learning in their programs, publications, and awards; exemplify the importance of partnerships for learning by establishing cooperative programs with other associations; and emphasize learning as a field of knowledge essential for graduate students planning careers in colleges or universities.

**Families** help students select a college or university based on its commitments to learning and student development and its learning environment; encourage students to choose and participate in a comprehensive program of educational activities throughout their collegiate experience; and help students to understand the value of reflection and to find time for concentrated study in their complicated lives.

**Government agencies** sponsor research and development on learning; offer incentives to institutions for new initiatives focused on collaboration for learning; and require evidence of institutional assessment of learning.

**All those involved in higher education, as professionals or as community supporters,** view themselves as teachers, learners, and collaborators in service to learning.

## Exhibit 5: Learning-Centered Assessment

*The Arizona Board of Regents in its Learner-Centered Education program define assessment as:*

Learner-centered education must retain the rigor and standards that traditionally have characterized higher education. The emphasis is on the student's competence and proficiency in specific areas of academic and professional knowledge, skills and understanding. Competency-based assessment is an integral part of learner-centered education. The learner is asked to achieve and demonstrate competence in academic and professional disciplines. Assessment may take a variety of forms, such as: tests, demonstrations, papers, portfolios, performances, individual reports, group reports, individual projects, group projects, and electronic presentations. Competence in an academic or professional area may be demonstrated by the learner's application of knowledge in solving real or simulated problems

*Learner-Centered Assessment on College Campuses: Shifting the Focus from Teaching to Learning. 2000. Mary Huba and Jann Freed. Allyn and Bacon. 286 pages.*

### *Examples on Developing Learner-Centered Assessment*

1. Change the educational paradigm from a teacher-centered approach to a learner-centered approach, so that the appropriate assessment measures are identified and used.
2. Learner-centered assessment promotes high expectations, respects diverse talents and learning styles, promotes coherence in learning, synthesizes experiences, integrates education and experiences, involves students in learning and promotes adequate time on task, provides prompt feedback, fosters collaboration, forces critical thinking, and requires increased student –faculty contact.
3. Learners integrate discipline-based knowledge and general skills and faculty facilitate intertwining of teaching (learning) and assessing.
4. Professors are learners too, and this is made clear to the students.
5. Apply principles of good practice in the assessment process (as well as the learning process).
6. Identify and share intended learning objectives – with assessment tied to those objectives.

### *Implications for the Organization and for Individuals*

7. Much of the infrastructure has developed to address the historical methods of teaching (e.g., courses are a semester in length, 3 hours per week). Grades and transfer procedures between universities are based on commonly accepted methods of instruction. A learner-centered approach requires more variety and flexibility in the infrastructure.
8. New approaches to learning must be justified to skeptical students (that the new approaches fit their style and won't delay their graduation plans by being "different"). Similarly, they must be justified to faculty peers and to the academic leadership to show these new approaches are educationally sound and cost effective.
9. For long-lasting success, the institution must be transformed to be learner-centered and that means the fundamental structures and processes will be significantly altered (including student support, rewards structures, information systems design, and cooperation with other institutions). It means success measures and funding arrangements for the institution cannot be measured by student "seat time" but by student learning.
10. Increased efforts on the part of faculty and the institution should be directed at faculty development, identification of new assessment measures, experimenting on a small scale, and building on the successful experiences of others.

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