

Instructional Theory

Akamai University Model of Education

Akamai Reflections from the Research Literature

Traditional research literature shows overwhelmingly that distance learning can achieve cognitive outcomes equal to those achieved by the more traditional means of educational delivery for adults. In fact, distance learning is understood to have an advantage over more traditional strategies when learning is closely aligned and related to the reality of life and work, such as under conditions where students remain fully engaged with their professional tasks while under the mentorship of qualified academics.

The interrelationship of academic projects within the work situation of the student permits effective integration of new learning with experience and the genuine tasks of the practitioner. This form of outcome, applied and integrated, differs greatly from simply providing disconnected sets of theories, principles and practices, no matter how well organized or financially endowed the presentation. Integration of knowledge that is done by students is likely to be more meaningful than integration that is done for them. Thus, engaging the adult student in creating and evaluating knowledge is viewed as a more viable epistemology. It is this vital factor that justifies Akamai's model of education, its systems of mentorship, independent study and external projects, since this engages adult students in organizing their own knowledge, rather than simply storing the inferences and appropriate sets of data that were put together by the experts.

This advanced instructional approach requires that the educational institution treat knowledge more open-endedly, allowing students to theorize more for themselves, giving them greater access to the data, greater responsibility and freedom, and the opportunity to engage in critical thinking, matching theories against real world observations. If an essential goal of higher education is to help students develop the ability to continue learning after the formal education is complete, it seems reasonable that they should have a good deal of supervised experience in learning independently. This can easily be carried out through the types of educational experiences afforded by Akamai University in which qualified mentors help the adult student formulate problems, find answers, and evaluate their progress themselves. (McKeachie, 1986, p. 143)

In summary, delivery of distance education at Akamai University relies heavily upon vital instructional models including one-on-one mentorship, responsibility and autonomy in learning, individualization of study, the active learning process, applied and process-centered curricula, and project-oriented learning environments. These elements of the Akamai instructional model for distance learning, assure maximum benefits in serving the needs of our adult students. This advanced model of distance education, together with high quality instructors, and access to a wide array of learning materials, permit Akamai to conduct effective programs at a distance.

One-on-One Virtual Mentorship

The effort to develop an analytical disposition among students along with skills in critical thinking seems to be an almost universal aim among educators in higher learning. Among our nontraditional delivery models, one-on-one mentorship seems to best achieve this end, allowing students to receive one-on-one guidance and individualized tutorial from qualified academic instructors, mentors, and professional advisors. Research has shown that mentorship is more effective at providing necessary feedback to students, increasing student study interests, and in promoting critical independent thinking. Mentorship is also capable of more clearly presenting and explaining the subject matter, and in helping students to more fully understand the principles, concepts, and theories of the coursework. (Au, 1993, p. 108) Akamai, through its proper application of mentorship instills in its students a questioning critical attitude that is accepted as one of the hallmarks of higher education. Students at Akamai who participate through distance learning, in whole or in part, have all of the outstanding advantages to be obtained from careful one-on-one mentorship.

Responsibility and Autonomy in Learning

It is generally recognized in the traditional academic literature that as students move toward autonomy, the teacher should remain in authority but transition progressively less in authority and more as a facilitator, as the student develops. Structures and boundaries must remain as features of the learning system but aspects of these should be less imposed and more negotiated. Effective teachers of autonomous learners combine the roles of manager, facilitator, and resource person, without excessively imposing their wills upon the students. (Elton, 1988, p. 219-220) Student autonomy has become associated with concepts such as self-responsibility, helping learners assume accountability for their own learning, and self-determination, based upon a awareness of needs and interests. Consequently, the target audience of Akamai University is focused upon mature individuals capable of reflecting in some practical detail upon their career field and the academic subject matter that informs that field of pursuit and inquiry. Akamai students then have high potential and capability to become accomplished autonomous learners.

Individualization of Studies

The scholarly research shows that autonomous learners pursuing individualized programs of study, on their own initiative, learn both from themselves and others, establishing a relationship of mutuality between themselves and their learning environment. At Akamai, individualized learning can occur at the program level, by selecting course modules that address academic and professional needs of the student, and at the subject matter level, through flexibility in designing subject matter assignments or selecting learning resources for the modules themselves. Traditional academic research clearly demonstrates that the innovation of combining distance learning and guided individualized study serves genuinely academic ends, enhancing the learning of facts and fundamentals, and the acquisition of skills. Unlike outcomes of distance education alone, adding program adaptability alleviates the danger of merely transmitting facts and opinions, which is so easy in highly structured programmed learning, as has become common across the distance education programs administered by some of the more traditional institutions. As adult students at Akamai search for facts in details, relationships, problems and solutions on their own, they perform a truly effective and advanced academic activity. (Holmberg, 1992, p.12)

The greatest departure from traditional education by individualized distance learning is its explicit recognition that education should be measured by what students know, rather than how or where they learn it. (Perraton, 1982, p.7) Back in the late 1980's, with the support of the Fund for Advancement of Education, a number of colleges experimented with large programs of independent study. It is important to recognize that few differences were found between achievement of students working independently and those taught in conventional classrooms. (Holmberg, 1992, p. 11)

The weight of evidence from traditional experimental studies suggests that approaches that individualize instruction are reasonably effective at improving the acquisition of subject matter content over more conventional subject matter approaches, such as the traditional lecture and classroom discussion. This learning advantage appears to occur without giving rise to undesirable side effects in terms of negative student attitudes toward instruction, increased withdrawal rates, or increased time required to meet course demands. (Pascarella and Terenzini, 1991, p. 89-93) At Akamai, our students are expected to individualize their programs, both to the expectations of their careers, and the unique requirements of their geographic areas. This is achieved by selection of the appropriate course array, and the individualization of the assignments, readings, research, field exploration, and preparation of scholarly papers.

Applied and Active Learning Processes

The passing on of academic content by passive assimilation, "teaching by telling" and "learning by listening" is less effective when working with career-based individuals returning to the educational arena while remaining fully engaged with their professional pursuits. The active learning process employed at Akamai University provides students the ability to apply new learning within real "communities of practice" rather than within a classroom-like setting in isolation from the real world. Akamai expects distance learning students to remain engaged with their professional endeavors while pursuing their studies. They are further encouraged to make use of the professional environment to individualize external projects and observations, as well as test the application of new learning.

Project-Oriented Learning Environments

When the mode of instruction engages students with project-oriented learning environments, as it is at Akamai, truly effective outcomes are possible. By this system, instructors are free to coach their students to view learning as an "active process" over which they should take initiative and exercise a great deal of control. The focus is upon moving student learning to higher levels of cognition, whereby they are required to create and evaluate, do independent and original thinking, make judgments, communicate unique ideas, feelings and experiences, and design effective solutions to "real life" situations and challenges. Akamai firmly believes that the nature of this type of outcome contributes greatly toward the development of effectiveness among our mid-career adult students. [Syllabus June 2002] Akamai makes full use of applied and active learning processes for each student, engaged with the real world of work, and this necessity and expectation is integrated at the initial stage of planning a student's study options.

Process-Centered Curriculum

Research demonstrates that students experience more effective learning outcomes by pursuing a process-centered curriculum. The more effective process-center systems are those where students are involved in choosing where and when they will learn, using teachers as guides, mentors and counselors rather than mere instructors, reflecting upon the learning process, and making significant decisions about these matters on their own as learners. (Lewis, 1988) At Akamai, by making use of processed-centered learning, students are more involved in the dialogue of understanding and identifying learning needs, setting goals, planning learning activities, finding appropriate resources for learning, working collaboratively with “real world” colleagues, selecting and defining learning projects, and creating problems to tackle.

Note: A good deal of the above material is drawn from the scholarly paper written by Dr. Douglass L. Capogrossi, *The Assurance of Academic Excellence among Non-traditional Universities*, published in the *Journal of Higher Education in Europe*, Volume 27, Number 4, December 2002, pp. 481-490, and from the works of the authors cited.