# THE KEY TO SUCCESS IN ELECTRONIC LEARNING: FACULTY TRAINING AND EVALUATION

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#### ABSTRACT

Over the past thirty years, higher education for adult students has emerged to help prepare the labor force for the 21<sup>st</sup> century in a world of globalization. At the same time, there have been massive advances in computing and the internet that provide many tools useful in higher education. Most universities now offer some form of electronic learning (EL), and many offer complete EL degree programs tailored for the working adult student. Now it is essential that managers of these new educational programs act to select and train faculty to fit the special needs of the adult student. More importantly, program managers need to use the new technology and learning theory to monitor program delivery and insure their program goals are achieved.

#### **KEYWORDS**

Andragogy, faculty evaluation, adult students

# 1. INTRODUCTION

Pedagogy is the theory of teaching children. Andragogy is the theory of teaching adults. In recent years, more attention has been paid to andragogy because many more adults are seeking higher education. New technologies related to computers and the internet have made available new possibilities in higher education, and educators have worked to understand and apply these new technologies in new ways to support the creation and dissemination of knowledge to adult students. See Scoppio and Covell, 2016. We are constantly learning new ways to teach adults, and we now understand that the theories and methods of pedagogy do not always apply to the adult student. See Boshier, 1998.

Traditionally secondary and higher education has been conducted in a small group setting in a classroom. In a "one room schoolhouse", the one room was a classroom. Over the last thirty years, education, especially higher education, has evolved to include electronic learning (EL) at a distance. Students work online, and the room in the one room schoolhouse is the server room – or the home office. These monumental changes in how we can best serve the adult student create new challenges and opportunities for the academy. See Wang, 2015.

## 2. FACULTY RECRUITING AND SELECTION

Teaching the adult student is different from teaching the traditional age secondary school or college student. The main difference is that the working adult student has experiences and perspectives based on work experience and practical knowledge. The adult student needs to know why certain learning objectives are presented and how they will add value. Younger students often do not have this perspective, and tend to accept guidance from an effective teacher. This unique aspect of the adult student has been documented around the world. See Gordivenko, 2013.

Not only is the adult student different, but the student in an electronic or distance learning environment is different and require a different approach in teaching. See Keller, 2014. This difference also has been found in many cultures and settings. See Baptista, 2013 and Alalshaikh, 2015.

The adult student will accept and respect the teacher (faculty) only to the extent that the teacher shows knowledge, experience, and respect. Adult students must find purpose and meaning in the material presented to them. The role of teacher in the electronic learning (EL) environment is to clarify the purpose and meaning based on professional experience. Student motivation must come from both the technical knowledge and the personal and professional experience of the teacher. Teachers for the EL environment should be selected based on their academic qualifications, their professional experience, and their ability to conduct a dynamic and effective EL experience for adult students. Continuing faculty training and evaluation can improve learning outcomes and program success. See Lakin, 2016.

Student retention and persistence are strongly influenced by the teacher-student relationship. Deans and Program Managers can increase the success of their educational programs by training and evaluating faculty in the use of modern teaching practices sought by and needed by the adult student. See Howell, 2012 and Binti, 2014.

Those who plan and manage EL programs should encourage and monitor the sharing of professional experience with students in EL courses. Learning Management Systems (LMS), such as Blackboard, eCollege, Canvas, Accenture, and others provide the tools to assure the EL classroom is a positive learning experience for all. In some cases, managers do not use these tools and do not provide an effective learning environment.

# 3. EFFECTIVE TEACHING PRACTICES

Faculty in the EL environment need to use techniques that are appropriate to the adult student, such as active learning. Active learning methods are those which engage the student and encourage application of concepts by analysis, reasoning, and exploration. Much research in active learning theory shows valuable benefits for students. See Chen, 2014. Faculty with relevant professional experience can find opportunities to apply concepts to real-world situations and motivate students to learn. Sharing of professional experience by faculty helps students see the relevance and usefulness of basic concepts and theory. See Knowles, Holton, & Swanson (2011).

Higher education should involve critical thinking. Proactive faculty in the EL setting should lead students to take basic concepts and apply them to different situations. Students should search for cause and effect, and they should be led to examine their assumptions and biases. Adult students learn by observation and by solving problems. The successful EL faculty will challenge students to stretch their perspectives by investigating new ideas and applying theory in new ways. Problem-based learning is one example of a teaching practice that fully engages the student. In problem-based learning, the student or a team of students face a practical problem and must deliver a solution. For excellent examples, see Romero, 2014.

Faculty can achieve excellence in the EL setting by engaging all students in a process of exploration. Students can be asked to identify their assumptions. They can be faced with a new case or situation to compare with others. The faculty can share personal experience when appropriate to illustrate a problem solved or a goal accomplished. Such activity is likely to resonate with the adult student and may lead them to identify additional real world problems and opportunities that apply to the learning objectives.

Because participants in the EL setting are not meeting face to face, it is possible for some students to be disengaged and not participate. Faculty should use LMS tools to monitor the activity of each student and encourage all students to participate in the discussions. Participation can be increased by posing questions to individual students, often based on their own experience or occupation. Faculty may ask one student to respond specifically to the discussion of another student, applying their experience or perspective. In addition, team assignments encourage students to participate and collaborate with each other.

A friendly and professional tone in the Electronic Learning (EL) course is a very important. An important difference in the EL course compared to a traditional course in a physical classroom is that the faculty and students do not see each other. Body language is not available to convey meaning, and faculty must be careful and avoid using language or tone that may be interpreted as abrupt, insensitive, condescending, or disrespectful. Faculty should maintain an atmosphere of openness and inclusion, and encourage active participation by all students to achieve an effective and collaborative learning environment.

Often faculty will find that students post discussions that are correct and complete. In such cases, the class discussion may proceed with little faculty intervention. In other cases, students may post incorrect information or may omit important considerations. In such cases, the faculty must intervene promptly and provide clarity. This correction and reorientation of the discussion need to be positive and encouraging – not punitive or disrespectful.

A positive and professional tone should be maintained by faculty in responding to student discussions. A faculty response should start with a positive statement acknowledging the student's post and efforts. Next, a correction or omission should be mentioned (once only) and documented. Cite personal experience if appropriate. Finally, a positive motivational statement should suggest future applications of the concepts involved related to the learning objectives. This approach makes corrections while still motivating and respecting the student.

These teaching practices have been found to enhance learning and take full advantage of the experience of the faculty. Managers should have methods in place to encourage and measure the use of these techniques.

# 4. STRATEGIES AVAILABLE IN THE EL COURSE

The technology available today offers many tools to promote learning in the EL setting. The widespread availability of computing devices makes higher education accessible to many non-traditional students. Innovative educators can apply this technology in many ways to promote learning, as we see in this conference. Much recent research informs us on useful strategies. See Chang, 2014.

There is a wide range of learning styles among adults, and higher education can best serve this audience with a broad range of teaching methods and strategies. Some students learn best by reading. Some learn best by interacting with other people. The new technology related to the internet makes possible the concurrent use of multiple approaches in higher education in the electronic learning environment. See Ghost-Bear, 2012.

Online discussions are the most common feature of the EL classroom. Asynchronous online discussions allow students to respond on their own schedule, and their comments are preserved for others to read and reply. When well written, discussions keep the comments on topic, they build on prior learning, and they set the stage for future learning objectives. They encourage students (and faculty) to share experiences and insights, and they help all students learn by applying textbook theory to real world situations.

In many courses case studies are useful. Cases can be analyzed as individual or team assignments, and then they can be discussed and dissected. Some cases are carried over throughout a course. The case approach to teaching was pioneered at Harvard Business School many years ago. Some medical schools use a case approach in a clinical setting. The case approach can enhance learning by creating an interactive learning environment. Students that are actively engaged in a learning activity, rather than passive, have been shown to learn more effectively. See Peshal, 2014.

Individual papers play an important role in most EL courses. The written assignment allows the student to research and review concepts, and then present creative work to address the assigned topic. The LMS platform provides an efficient mechanism to receive and host papers and check for plagiarism and format. It may be useful for students to read and critique the papers of other students as a learning activity. Individual papers also provide a record of student accomplishment and may be suitable to build a portfolio to document academic progress.

There also is a role for team assignments that lead to papers or presentations. Many employers cite the ability to work in teams as an important skill they seek. In completing team assignments, team members collaborate with each other, draw on their experience, plan and execute research, and critically evaluate their assumptions and beliefs. Most important team members present their ideas to each other and justify their conclusions. This process of first learning and then explaining to others is the highest form of active learning.

Quizzes have always been used in education to measure learning and identify areas needing more emphasis. The LMS platforms provide means to administered timed tests, and random selection of questions from large problem sets can be used. Some programs use monitored quizzes to insure validity. Quizzes give students prompt feedback on which concepts they have mastered and which concepts need more attention.

Some academic programs use live video conferencing or videotaped lectures to increase student involvement and possibly replicate the traditional classroom. In some cases, these techniques have been successful. See Malinovski, et al, 2015.

These strategies have been shown to add value for adult students. They suggest approaches that Deans and Program Managers can use to manage programs and evaluate faculty performance. See Pulkka, 2013.

## 5. OVERSIGHT OF FACULTY TO ACHIEVE EFFECTIVE LEARNING

Deans and Program Managers can monitor their EL programs for effectiveness, consistency, and proper implementation of local policies. Some faculty may be practitioners from industry rather than full-time professors. So, monitoring can insure that students in an EL program have consistency across their courses. Monitoring can help guide a program by identifying areas for improvements to the curriculum and faculty training. The consistent evaluation of courses and faculty help to insure the courses are presented in a way that supports program goals and policy.

LMS provide many tools to monitor and evaluate the presentation of courses. One essential requirement in the EL environment is that faculty are present and active in the online classroom. Faculty and student frequency and duration of engagement by day and hour can help to identify any shortcomings. Such measures can identify problems with faculty or student participation in time to make proper adjustments. As faculty and students learn that frequency of participation is monitored, performance should improve.

LMS provide a mechanism for students to post assignments and for faculty to post grades. The time required for this process in each case can be measured to verify compliance with local policy. Students submitting late assignments can be identified and counseled. In addition, analysis of the pattern of assignment submission and grading may assist in program review and development.

### 6. CONCLUSIONS AND RECOMMENDATIONS

Higher education programs for working adult students need to be planned and executed in accordance with recent advances in education theory. The adult student has unique needs and experience, and faculty needs to be trained for this challenge. Most important, program managers need to insure programs are monitored to insure that they are presented properly to achieve the goals of students and institutions.

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